



NAVAL POSTGRADUATE SCHOOL

MONTEREY, CALIFORNIA

THESIS

**ARMY JUNIOR OFFICER EDUCATION: AN
ASSESSMENT OF INSTITUTIONAL LEARNING**

by

Christopher S. Landers

December 2007

Thesis Advisor:
Second Reader:

Douglas Borer
Pete Gustaitis

Approved for public release; distribution is unlimited

THIS PAGE INTENTIONALLY LEFT BLANK

| | | | | |
|--|---|--|--|--|
| REPORT DOCUMENTATION PAGE | | | <i>Form Approved OMB No. 0704-0188</i> | |
| Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instruction, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188) Washington DC 20503. | | | | |
| 1. AGENCY USE ONLY (Leave blank) | | 2. REPORT DATE December 2007 | 3. REPORT TYPE AND DATES COVERED Master's Thesis | |
| 4. TITLE AND SUBTITLE Army Junior Officer Education: An Assessment of Institutional Learning | | | 5. FUNDING NUMBERS | |
| 6. AUTHOR(S) Christopher S. Landers | | | | |
| 7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Naval Postgraduate School Monterey, CA 93943-5000 | | | 8. PERFORMING ORGANIZATION REPORT NUMBER | |
| 9. SPONSORING /MONITORING AGENCY NAME(S) AND ADDRESS(ES) N/A | | | 10. SPONSORING/MONITORING AGENCY REPORT NUMBER | |
| 11. SUPPLEMENTARY NOTES The views expressed in this thesis are those of the author and do not reflect the official policy or position of the Department of Defense or the U.S. Government. | | | | |
| 12a. DISTRIBUTION / AVAILABILITY STATEMENT Approved for public release; distribution is unlimited | | | 12b. DISTRIBUTION CODE | |
| 13. ABSTRACT (maximum 200 words) <p>As the Army continues its transformation into a more lethal and responsive force, in the midst of the War on Terror, it becomes increasingly important to make qualitative and critical assessments of our progress. One of the most important aspects of that transformation is how we educate the leaders of tomorrow. Are we providing the quality institutional education that will allow these new officers to meet the challenges of modern warfighting in the contemporary operating environment?</p> <p>The developmental education systems of the United States Military Academy and the Reserve Officer's Training Corps are designed to provide the foundational knowledge, skills and attributes to ensure success in combat and continued, lifelong learning. In this regard, both systems are marked with much improvement over the past several years. In fact, today's graduates are more capable and informed than any of their predecessors. Despite the improvements, daunting challenges remain for both systems, though they differ in nature and solution. The physical transformation of our Army is continuous and so too must be the mental transformation. Without improved focus on leadership, adaptability and the skills of the Pentathlete leader, our young officers face the prospect of fighting wars for which they are physically, but not yet mentally, prepared.</p> | | | | |
| 14. SUBJECT TERMS Officer education, OES, officer training, ROTC, BOLC, leadership, transformation | | | 15. NUMBER OF PAGES 77 | |
| | | | 16. PRICE CODE | |
| 17. SECURITY CLASSIFICATION OF REPORT Unclassified | 18. SECURITY CLASSIFICATION OF THIS PAGE Unclassified | 19. SECURITY CLASSIFICATION OF ABSTRACT Unclassified | 20. LIMITATION OF ABSTRACT UU | |

NSN 7540-01-280-5500

Standard Form 298 (Rev. 2-89)
Prescribed by ANSI Std. Z39-18

THIS PAGE INTENTIONALLY LEFT BLANK

Approved for public release; distribution is unlimited

**ARMY JUNIOR OFFICER EDUCATION: AN ASSESSMENT OF
INSTITUTIONAL LEARNING**

Christopher S. Landers
Major, United States Army
B.S., Rochester Institute of Technology, 1996

Submitted in partial fulfillment of the
requirements for the degree of

MASTER OF SCIENCE IN DEFENSE ANALYSIS

from the

**NAVAL POSTGRADUATE SCHOOL
December 2007**

Author: Christopher S. Landers

Approved by: Dr. Douglas Borer
Thesis Advisor

Pete Gustaitis
Second Reader

Dr. Gordon McCormick
Chairman, Department of Defense Analysis

THIS PAGE INTENTIONALLY LEFT BLANK

ABSTRACT

As the Army continues its transformation into a more lethal and responsive force, in the midst of the War on Terror, it becomes increasingly important to make qualitative and critical assessments of our progress. One of the most important aspects of that transformation is how we educate the leaders of tomorrow. Are we providing the quality institutional education that will allow these new officers to meet the challenges of modern warfighting in the contemporary operating environment?

The developmental education systems of the United States Military Academy and the Reserve Officer's Training Corps are designed to provide the foundational knowledge, skills and attributes to ensure success in combat and continued, lifelong learning. In this regard, both systems are marked with much improvement over the past several years. In fact, today's graduates are more capable and informed than any of their predecessors. Despite the improvements, daunting challenges remain for both systems, though they differ in nature and solution. The physical transformation of our Army is continuous and so too must be the mental transformation. Without improved focus on leadership, adaptability and the skills of the Pentathlete leader, our young officers face the prospect of fighting wars for which they are physically, but not yet mentally, prepared.

THIS PAGE INTENTIONALLY LEFT BLANK

TABLE OF CONTENTS

| | | |
|------|--|----|
| I. | INTRODUCTION..... | 1 |
| II. | NEW ENVIRONMENT, NEW REQUIREMENTS | 5 |
| A. | THE GLOBAL SECURITY LANDSCAPE..... | 5 |
| B. | THE NATURE OF WAR, THE ENEMY AND THE PHYSICAL ENVIRONMENT | 7 |
| C. | NEW REQUIREMENTS | 10 |
| III. | THE CURRENT PROFESSIONAL EDUCATION SYSTEM | 17 |
| A. | BABY STEPS IN A NEW DIRECTION | 17 |
| B. | DOMAINS OF LEARNING | 22 |
| 1. | Pre-commissioning Education in the Institutional Domain | 24 |
| a. | <i>Reserve Officer's Training Corps (ROTC)</i> | 25 |
| b. | <i>The United States Military Academy at West Point (USMA)</i> | 28 |
| 2. | Post-commissioning Education in the Institutional Domain | 32 |
| IV. | ANALYSIS, RECOMMENDATIONS AND CONCLUSIONS..... | 37 |
| A. | RESERVE OFFICER TRAINING CORPS..... | 38 |
| 1. | Strengths and Improvements | 38 |
| 2. | Challenges..... | 40 |
| B. | THE UNITED STATES MILITARY ACADEMY | 44 |
| 1. | Strengths and Improvements | 44 |
| 2. | Challenges..... | 46 |
| C. | BOLC II AND III..... | 47 |
| D. | RECOMMENDATIONS FOR CHANGE | 47 |
| E. | CONCLUSION | 55 |
| | LIST OF REFERENCES..... | 59 |
| | INITIAL DISTRIBUTION LIST | 67 |

THIS PAGE INTENTIONALLY LEFT BLANK

I. INTRODUCTION

American military education has at its heart two crucial processes—the making of lieutenants and the making of colonels. How we prepare young men to lead others into battle, and how we ensure that those who assume the highest levels of commands are well-qualified, are issues that must be addressed with the utmost seriousness, because failure here can have the gravest of consequences.¹

As the quote above indicates, leader development is particularly important in the creation of our junior leaders. Their ability to master the skills, develop the attributes and gain the knowledge required of leaders on tomorrow's battlefield will determine the outcome of war's fought in a new operating environment. Gone are the days when successful performance of a few mission essential tasks translated to battlefield successes. Not only have the number of tasks to be performed increased exponentially, but so has their complexity. The strategic environment in which today's Army finds itself has changed so dramatically since the collapse of the Soviet Union, that, to remain relevant, every aspect of the Army must make commensurate changes. While most are familiar with the technological and structural transformations that the Army has undertaken, there is little known about the efforts to educate leaders in a transformative way. The lack of understanding is in part because very little has been done in the way of changing education, when compared to the physical transformations. Our response to the new era of warfighting has been to update our equipment, invest in new-technology and re-structure our forces with the goal of creating a relevant land force capable of fighting and winning in any environment. The ever-changing, asymmetric, often ambiguous strategic environment, as well as our predominantly physical response to it, have placed increasing challenges on leaders at all echelons of command.

¹ Theodore J. Crackel, "On the Making of Lieutenants and Colonels," *The Public Interest* 76 (Summer 1984): 18.

Training will not suffice. There are simply too many tasks on which to train in order to gain any semblance of mastery. For that matter, task mastery, if possible, would not secure victory. Victory rests and will continue to rest in the mind of young leaders; those making the decisions in the gray area between peace and war. How they act should not be driven by rote memorization or the lock-step following and issuance of orders, but by their intuition, assessment of the situation, critical analysis of the problem and ability to put the situation in the context of the bigger picture. Above all, it comes down to decisive leadership at the critical moment; adaptive when the situation changes and anticipatory of the consequences. As the most dynamic component of combat power, leadership has won the day in countless battles and will continue to do so as long as our military remains in existence.² The physical tools have been provided, but are the mental attributes necessary in deciding when, how and if to use them being developed adequately? It is within this human dimension of combat that lay the keys to success. Strengthening this dimension will require the greatest investment of time and resources.

This will require a cultural shift, from measuring success by the killing of the enemy and capturing of his equipment, to the realization that this is only a small component of success. Victory lies in the populations we are charged with protecting. When, regardless of what the enemy does, the populations, their minds and collective actions side with us, we will win. This cultural shift is best attained in those who've experienced no other Army culture to which they can default; our newest and future leaders.

While field and flag grade officers must make sweeping changes to amend our approach to fighting a modern war, nowhere in our Army is the effect of the global landscape more profound than it is on junior officers and leaders. For that reason, this paper focuses not on the continued or advanced education of mid-grade and senior officers, but on the foundational development of our junior

² Field Manual 3-0, Operations, Headquarters, Department of the Army (Washington, 2001), 4-7.

leaders. It is among this group that we find the least experience, least expertise and highest likelihood for error. Because they are on the forefront of a war of and for minds, visible to the world, their errors will have the gravest impact on the outcome. Conversely, however, in this group of young and future leaders, we find the most malleable raw material from which to begin a transformation in thinking and learning. This group possesses the most transformation-ready minds in the force, unfettered by organizational learning and biases, with no memory of the ideology that brought victory in the past. This study seeks to analyze the strategic, operational and tactical environment in which young leaders of our Army currently find themselves; and will continue to find themselves in the foreseeable future. In doing so, we can answer some of the more challenging and debated questions of officer education: 1) What are the educational requirements for young officers in the current and future operating environment? 2) Does the current system provide the breadth and depth of learning required of that environment? 3) If not, what changes are needed to create a program of developmental learning that will create the “Pentathlete” Leader we so desperately need to wage tomorrow’s wars?³

Chapter II analyzes the environment in which leaders find themselves. It looks at not only the tactical situations, but the strategic implications that those situations may generate. The environmental analysis will necessarily focus on some of the more important changes since the end of the Cold War: the global landscape, the nature of our conflict, the effect of technology and information on the battlefield, and the physical environment; urban and populated. In analyzing this new environment, it becomes clear that young officers must not only learn new and more complex tasks, but understand their environment from a more strategic standpoint. Contextual knowledge of the nation, region and its people become more important. Cognitive skills, knowing “how to think” as opposed to

³ “Pentathlete” is a term used by Secretary of the Army Harvey and Army Chief of Staff, GEN Schoomaker, in the 2007 Army Posture Statement, to describe a leader who is agile and adaptive, able to learn and adapt to new situations in a constantly changing environment.

what to think must be developed and nurtured. The environment will also show that leaders must become more self-aware, adaptive, emotionally intelligent and critically-thinking.⁴

Chapter III describes the current junior officer education system in the construct of the Army's three "domains" of learning: the institutional, the operational and the self-development. The chapter will describe the reasons for and summary of the changes that have occurred in the last decade, and the resultant system. As this thesis pertains to junior officers, this chapter will focus on the two primary pre-commissioning education systems, the Reserve Officer Training Corps (ROTC) and the United States Military Academy (USMA), as well as the immediate post-commissioning schools. Of the three "domains" of learning this paper will address the institutional, as it provides the foundation for development in the other two.

Chapter IV will analyze the current system and make assessments as to whether or not the current junior officer education systems are meeting the challenges that arise in the contemporary operating environment. The basis of analysis is how effectively those systems develop the characteristics of a "Pentathlete" warrior, as defined by the Army Chief of Staff and Army Secretary.⁵ Finally, the chapter will include a recommendation for changes in our officer education system to maximize development of the knowledge, attributes and skills required of young leaders in the future operating environment. The costs and risks of the recommended changes are subjects that require further and separate study. While not addressed in this thesis, they will principally involve increased time and money spent on pre-commissioning education and the education of qualified and competent instructors.

⁴ Donald E. Vandergriff, *Raising the Bar: Creating and Nurturing Adaptability to Deal with the Changing Face of War* (Washington, DC: Center For Defense Information, 2006), 42-46.

⁵ In 2005, the Army senior leadership described the leader of the future Army as a "Pentathlete;" multi-skilled across the full-spectrum, adaptive, agile, innovative, skilled in governorship, statesmanship and diplomacy and culturally astute, to name a few of the qualities.

II. NEW ENVIRONMENT, NEW REQUIREMENTS

*The dogmas of the quiet past are inadequate to the stormy present. The occasion is piled high with difficulty, and we must rise with the occasion. As our case is new, so must we think anew and act anew.*⁶

-President Abraham Lincoln

A. THE GLOBAL SECURITY LANDSCAPE

The last 15 years are marked with some of the most sweeping social, political and economic upheavals in recent history. Amidst the changes, our concept of what constitutes a security threat and the corresponding Cold War assumptions must be radically reexamined.⁷ While some threats from the Cold War era remain, they are joined by an increasingly complex array of global issues that pose credible and growing threats to our security.

The Soviet collapse brought a premature sigh of relief for many security practitioners, based partially in the belief that the world was now a safer place. Fast forward to the new millennium and we can see that security remains somewhat distant, still beyond our grasp. While the threat of Armageddon has subsided with the collapse of our most feared enemy, the threat of violence has only increased, though in new forms. In 2002, there were 175 small-scale internal wars, 79 low intensity conflicts, 32 complex emergencies and 18

⁶ Abraham Lincoln, Second Annual Message to Congress, 1 December 1862; available from <http://home.att.net/~howingtons/abe.html>, accessed 11 October 2007.

⁷ Graham H. Turbiville, "Preface: Future Trends in Low Intensity Conflict," in *Networks, Terrorism and Global Insurgency*. Robert J. Bunker, ed. (New York: Routledge, 2006), xi.

genocidal ethnic wars occurring simultaneously throughout the globe.⁸ Since the end of the Persian Gulf War, some 80-120 million people have lost their lives, most to violence.⁹

Of the 192 member nations in the United Nations, a growing number are considered to be failed or failing states. These nations, unable or unwilling to provide for their people, are at the heart of the violence. Failing governments are being subjected to challenges to their sovereignty by both internal and external competitors and the resultant violence and depravity have caused an upward spiral of UN and other international peacekeeping and peace enforcement strategies; in which the U.S. Army plays an important role. These conflicts give rise to new, non-traditional actors in an increasingly violent world. Gone are wars fought for expansion and imperialism. The new wars are fought for autonomy, scarce resources, ideology, ethnicity, culture and survival. Far from peaceful settlement, “these wars beget more violence, more despair and a resort to more asymmetric tactics as increasingly incompetent, corrupt and intolerant quasi-governments come to power.”¹⁰

In a new chaotic world order, national security takes a tangential departure from deterring a near-peer competitor to nation-building, enforcement of civil rights and human liberties and policing. While other instruments of statecraft are sure to be used to stem the violence, the interjection of the Army is almost assured. America’s Army will increasingly find itself not waging war against a singular enemy, but quelling one between multiple factions. In doing so, we will find ourselves in the midst of what Lind, Wilson, Suttan and Schmidt define as 4th Generation Warfare, or 4GW.¹¹ 4th Generation warfare is “undefined, nonlinear, with no definable fronts and where the distinction between war and

⁸ Max G. Manwaring, “The New Global Security Landscape: The Road Ahead,” in *Networks, Terrorism and Global Insurgency*. Robert J. Bunker, ed. (New York: Routledge, 2006), 21.

⁹ Ibid., 21.

¹⁰ Ibid., 22.

¹¹ William S. Lind et al. “The Changing Face of War: Into the Fourth Generation,” *Marine Corps Gazette*, October 1989, 22-26.

peace is blurred.” We will find ourselves protecting the legitimacy and sovereignty of friendly governments, preventing state failure; and assisting in the toppling of hostile governments. At stake is regional and global stability that will affect the business, economic and security aspects of American life. It is in this world that the future leaders of the Army will find themselves, and for it, they must be prepared. Here, mastery of military tactics and doctrine, and technological wizardry will be of lesser value than a thorough understanding of the politico-military situation in which we find ourselves. 4GW dictates that officers will be exposed to more complex and ambiguous problems earlier in their career. As the glide-path for learning becomes steeper, our youngest warrior-leaders will be statesman, ambassadors and police. Our professional military education system must be up to the task of preparation.

B. THE NATURE OF WAR, THE ENEMY AND THE PHYSICAL ENVIRONMENT

In FM 1, the Army categorically defines the future enemy challenges as: traditional, irregular, disruptive and catastrophic.¹² The traditional enemy threat is that from a conventional army, with recognizable military capabilities and fighting in well-understood manner, adhering to the general laws of war. Iran, North Korea and China are the most recognized possessors of this type of threat, though not exclusively. Irregular threats are those that aspire to use unconventional means to bypass the traditional force advantages of their opponent.¹³ They seek to mitigate their adversary's military power by forcing a conflict on their terms, terms that necessarily limit the applicability of that power. Catastrophic threats are those that arise from the proliferation and acquisition of weapons of mass destruction (WMD). The 2004 National Military Strategy

¹² FM 1, The Army, Headquarters, Department of the Army (Washington, DC: 2005), 4-1.

¹³ John A. Nagl, *Learning to Eat Soup with a Knife: Counterinsurgency Lessons from Malaya and Vietnam* (Hartford, CT: Praeger Publishers, 2002), 214.

defines disruptive threats as “challenges that may come from adversaries who develop and use breakthrough technologies to negate current U.S. advantages in key operational domains.”¹⁴

Clearly, the traditional threat is that for which we are most prepared. The Persian Gulf War and the initial stages of Operation Iraqi Freedom are illustrative of our prowess in countering the nature of this threat. It is the other three that represent the greatest departure from the status quo. Catastrophic and disruptive threats will certainly require military action, but the nature of these threats are such that they are not likely to be performed by the Army at large, but by Special Operations Forces and other government agencies. The threat most likely to be faced by the vast number of junior officers is that posed by adversaries employing irregular means.

As the environmental synopsis above alludes, this threat is growing and is perpetrated by an ever-widening range of adversaries. Not only is the enemy a state or state-like group, but growing numbers of non-state and sub-state organizations are challenging local, regional and international security, facilitated by the collapsing legitimacy of states. Some, like Al Qaeda, are direct antagonists to the U.S., while others are not; though their actions are detrimental to the security of our allies. Added to the fray are organized criminal enterprises and other illegal armed groups.¹⁵

From the perspective of the junior officer, the method by which the enemy operates is as important as who constitutes the threat. As insurgents and violent sectarian groups in Iraq suggest, the enemy is operating within the grey area between peace and war. He is well armed, un-uniformed and displays utter contempt for the civilians by whom he is surrounded and has no concern for the law of war or human rights. The most dangerous enemy fights not in formations, armed with tanks and artillery, but in small, networked cells, interconnected and

¹⁴ “The National Military Strategy of the United States of America,” Office of the Chairman of the Joint Chiefs of Staff (Washington, 2004), 4.

¹⁵ “The National Military Strategy of the United States of America,” Office of the Chairman of the Joint Chiefs of Staff (Washington, 2004), 5.

autonomous. The enemy in Iraq, our most relevant example, hides among the civilian populace and from them garners support, protection and information. He is unrecognizable until he attacks and when he does, it is at the time and place of his choosing. This irregular approach has served him well in mitigating our force advantage and rendering technology ineffectual.¹⁶

If the struggle in Iraq is indeed an introduction to the way in which future wars will be fought, we must pay strict attention to the effect that civilian populations have on our ability to wage war effectively. Iraqi insurgents have learned, with our enemies watching, that the persistent presence of large civilian populations is an effective way to hold in check the power of our weapons and the effectiveness of our technology. For this reason, insurgents and terrorists choose not to fight in open deserts, but in heavily populated urban centers. There, the presence of non-combatants and media coverage assures that heavy-handed actions, possibly by a highly trained but improperly educated young leader, produce a strategic victory. The nature of today's enemy places our smallest elements, led by our most junior leaders in near-constant contact with civilians across the battlespace. While killing or capturing insurgents are one of many *tasks* to be executed by young leaders and their units, the people by whom they are surrounded everyday are their *mission*. The operating environment is one in which we are to secure populations, maintain order, provide civic action, appease grievances, promote goodwill and instill good governance. The young leaders in Iraq, or any number of failing or failed states in the future, are finding their roles to be ever more complex. As Iraqis increasingly adopt sectarian identities, it becomes more apparent that this is a war for the minds and wills of people.¹⁷ It is in this operating environment and for this mission that we must educate leaders.

¹⁶ Thomas X. Hammes, *The Sling and the Stone, On War in the 21st Century* (St. Paul, MN: Zenith Press, 2006), 190-202.

¹⁷ James A. Baker III et al, *The Iraq Study Group Report* (Washington, DC: United States Institute for Peace, 6 December 2006), 8.

But not all of the challenges are brought on by the irregular nature of the enemy. Technologic improvements have led to an increasingly sparse and diffuse battlefield. Forces are no longer massed in large formations attacking the enemy on along a known front. Today's Army fights in a dispersed, discontinuous battlefield, with smaller units responsible for ever growing areas of terrain and corresponding populations. In Iraq and Afghanistan, fighting is typically done at the platoon level, with enemy engagements rarely involving larger U.S. formations. Radio, satellite and internet connectivity has replaced face-to-face interaction between leaders and subordinates. In this situation, junior leaders are more likely to find themselves in operational environments very different from that of their adjacent units and that of their commanders. The lack of direct oversight can drive decision making to lower echelons, forcing young leaders to act of their own accord. Decentralization, however, does not mean isolation. Through modern intelligence, surveillance and reconnaissance (ISR) systems, commanders are able to "see" the battlefield in which young leaders are fighting. But sight does not equate to understanding. Although commanders may be connected electronically to their young leaders, the very fact that they are often not co-located limits the relevance of their guidance and rapid changes in the situation can make it quickly obsolete. More and more, decisions of our youngest leaders are becoming theirs and theirs alone. With near real-time media coverage and ever-present civilian populations, those decisions no longer rest solely in the tactical domain. The 2004 shift of Ar Rutbah, Iraq from a tranquil area to a hub of violence is demonstrative of how tactical and ethical missteps at the lowest levels can move an entire town into the "loss column."¹⁸

C. NEW REQUIREMENTS

Professional Military Education (PME) has been the subject of much debate since the end of the Cold War. The essence of this debate is rightfully

¹⁸ Thomas E. Ricks, *Fiasco, The American Military Adventure in Iraq* (New York: Penguin Books, 2007), 276.

centered on the changing global security environment addressed earlier. With the collapse of the Soviet Union, the United States faces a far more dynamic, and in many ways, more challenging world arena in which our military forces must perform the vital mission of protecting and advancing our national interests and those of our allies. Indeed, the operating environment in which company grade officers find themselves is unrecognizable to those trained for the Cold War; large-scale, direct military action against a near-peer. In the face of new, ambiguous and emerging crises, the task of educating officers in the Army faces the challenge of remaining relevant and appropriate in the ever-changing global landscape.¹⁹ “The transformation of the Army demands a change in our educational approach and philosophy. The first element of this may be for the Army to recognize that conflicts such as Kosovo, Bosnia, Somalia, and Haiti are not unique, but rather are the types of conflicts that we will be engaging in for a significant period of time.”²⁰

The Global War on Terror (GWOT) continues to prove that the enemy has changed, the method of employing our troops has changed, the terrain has changed and, therefore, what we require of our young leaders has also changed. Success in the current and future operating environment is less about killing adversaries and more about protecting populations and infrastructure, maintaining freedoms and furthering democracy.

To that end, a strictly tactical education, with a focus on task mastery, may prove to be inadequate. The training that has proved successful in high-intensity ground combat (major combat operations) may not translate well to the future operating environment, against an irregular foe. Young leaders must possess cognitive skills that will inform them how to think in a maneuver/counter-maneuver (strategic) mindset that creates tactical mismatches. They must possess the brainpower to fight a war of and for minds, when his weapons are

¹⁹ Cynthia A. Watson, *Military Education, A Reference Handbook* (Westport, CT: Praeger Security International, 2007), xi.

not sufficient, in and of themselves, to secure victory. Without a properly educated, and to a degree, strategically minded company grade leader, transformation of our military in terms of structure and equipment is merely cosmetic. For that reason, education should be the foundation of any transformative efforts.

Undoubtedly, in-depth training in individual skills and small unit drill are mandatory and indispensable on the battlefield. Young leaders possessing these skills will save soldiers lives and defeat the enemy. Regrettably, they cannot defeat the armed enemy they cannot find, and killing him will not win the war. A counterinsurgency (COIN) campaign, for example, is not simply a lesser included form of major combat operations (MCO). Instead, it is a completely different kind of war, one that requires a completely different application and type of force in size, structure and competencies. A transformation is currently underway, but its discussions and applications tend to be limited to equipment and structure, with recent and tentative steps aimed at education. Advanced equipment and new structures will only be effective if we first educate our most junior leadership differently; transformation must first take hold in the mind of the leader before it can take hold in the organization.

With the arrival of the information age, an age in which the “narrative” (message, perception) of a ground operation has far greater effect than the action itself, the requirement for strategic thinking has moved and continues to move to lower echelons of command, throughout the force.²¹ Every tactical action now possesses a strategic or political consequence. A tactical success can easily create a strategic failure and realizing this, the young leader must not only be a tactician, but have the wherewithal to understand the strategic implications of his actions, in a broader sense, on the campaign and policy. As Cebrowski succinctly notes, “warfare is bigger than combat and combat is bigger

²⁰ Jeffrey D. McCausland and Gregg F. Martin, “Transforming Strategic Leader Education for the 21st Century,” *Parameters* (Autumn 2001): 17-33.

than shooting.”²² To facilitate this thinking, young officers must understand the cultural context in which wars of our generation will be fought. Critical to this understanding is knowledge in areas of diplomacy, building consensus, conflict resolution, negotiation, mediation / arbitration, interagency familiarization, intelligence collection, basic civic action and coordination; all skills they are required to develop through operational experience on a daily basis in both Iraq and Afghanistan as they are not addressed adequately in institutional learning environments. Those skills, once the domain of Army senior leaders is now the province of the lieutenant. If we hope to master the military art in such a complex operating environment, it will require leaders who are adaptive, able to think critically, intuitive, developed emotionally, culturally astute and self-aware.²³

The net effect is that today’s young officers enter a world that is infinitely more dangerous and hostile. The insurgency in Iraq is demonstrative of 4GW in that there exists no clearly defined battlefield and transition from peaceful civic action to close combat and vice versa can occur in a matter of minutes. Adapting to this environment is not a matter of materiel and technology, but one of education and understanding. The leaders on the battlefield must come to learn that their actions and reactions may have much to do with whether or not that shift occurs and how often it does.

Despite the lacking eminent danger of a strategic military competitor, a nation with the capability *and* will to confront the United States militarily, the national security of the United States may be as precarious as ever. The collapse of the Soviet Union has served to end the era of a polarized globe, replacing it with a fragmented international society of conflicting ideologies, beliefs and goals. Conflict is on the rise and although smaller in nature, it

²¹ John Arquilla, “Warfare in the Information Age,” (Class lecture), Naval Postgraduate School (Monterey, CA: Fall 2006).

²² John T. Bennett, “Cebrowski Calls For New Training Methods For Combat, Postwar Ops,” *Inside the Pentagon*, September 11, 2003, 3.

²³ Donald E. Vandergriff, *Raising the Bar: Creating and Nurturing Adaptability to Deal with the Changing Face of War* (Washington, DC: Center For Defense Information, 2006), 42-46.

continues to pose credible and growing threats to our security and that of our allies. The U.S. faces military challenges in major regional conflicts, dealing with internal threats to friendly regimes, addressing a host of transnational dangers, supporting large-scale disaster relief and humanitarian assistance operations and countering the proliferation of weapons of mass destruction.²⁴ “These threats blur the traditional distinctions among military, law enforcement and other roles and missions and have strong interagency and international dimensions in an environment characterized by change, uncertainty and surprise.”²⁵ Furthermore, “how we perceive these threats will be a strong determinant of the types of forces we try to acquire, the doctrine we develop and the training we follow for use of those forces in combat.”²⁶

In Iraq, our perception was not very different from that of 1990-1991, when, through conventional means, we ousted Saddam and his Army from Kuwait with relative ease. Four years later, the perceptual error has become painfully obvious, and while our perception has indeed shifted, we have been slow, as an Army, to adapt strategy in both education and application of force to match the modified perception. Our ability, as an organization, to adapt to the change is an important component of our ability to guarantee our own security.²⁷ The ambiguity of an environment that is rife with constant and unpredictable change will necessitate that the Army become what Nagl calls a learning organization.²⁸ Critical to learning is the inculcation of a culture that rewards creativity and adaptability. The new culture is not an abandonment of what we know, but an acceptance of the changing world. The threat of major combat

²⁴ Graham H. Tuberville et al, “The Changing Security Environment,” *Military Review*, June-July 1997 [journal online]; available from <http://fmso.leavenworth.army.mil/documents/1stmr.htm>; Internet; accessed 11 October 2007.

²⁵ Ibid.

²⁶ Carl H. Builder, *The Masks of War: American Military Styles in Strategy and Analysis* (Baltimore: Johns Hopkins University Press, 1989), 128.

²⁷ John A. Nagl, *Learning to Eat Soup with a Knife: Counterinsurgency Lessons from Malaya and Vietnam* (Hartford, CT: Praeger Publishers, 2002), 214.

²⁸ John A. Nagl, *Learning to Eat Soup with a Knife: Counterinsurgency Lessons from Malaya and Vietnam* (Hartford, CT: Praeger Publishers, 2002), 6.

operations against a conventionally armed military force still exists, and for it we must also be prepared. The cultural change, grounded in education, is the broadening of our force into a truly full-spectrum capability, focusing on the development of knowledge, skills and attributes that are applicable in any environment. Education that will produce cognitively developed, critically thinking, emotionally intelligent young strategists will be the cornerstone of change and will extend our competence well beyond the high-end of the conflict spectrum and into the environment that exists when the tanks and artillery are silent. It is here that the gap in education, and by extension, the gap in capability, exists. As war looks less like war, for what do we educate our leaders?

THIS PAGE INTENTIONALLY LEFT BLANK

III. THE CURRENT PROFESSIONAL EDUCATION SYSTEM

*The focus of leader development is on the future to prepare Soldiers and civilians for increasing levels of responsibility. Leader development is accomplished through a lifelong learning process that takes place through operational experience, in Army schools and training centers, and self-development.*²⁹

A. BABY STEPS IN A NEW DIRECTION

In October of 1999, the Army leadership released *The Army Vision*, in which is explained how the Army will meet the security requirements of the nation in the 21st century. The Army Vision laid the foundations for the Army's continuing transformation into what is known as the Objective Force; "a force that is strategically responsive and dominant at every point on the spectrum of conflict."³⁰

Subsequently, in 2001, the Army published FM 1, *the Army*, and FM 3-0, *Operations*, which explained the "role and contributions of the Army at the strategic, operational and tactical levels of war and as a member of joint, interagency and multinational teams." The documents provide the context for a complete understanding of Army Transformation and the Objective Force—how The Army operates as the land component of America's joint war-fighting team."³¹ The Army Vision, FM 1 *The Army* (2001) and FM 3-0 *Operations* (2001), prescribe seven characteristics that will guide the transformation to the Objective Force: responsive, deployable, agile, versatile, lethal, survivable and sustainable.

²⁹ "2007 Army Modernization Plan, Annex C: Training and Leader Development." Washington DC: Office of the Deputy Chief of Staff, G-8, 2007; available at <http://www.army.mil/institution/leaders/modplan/2007/high-res/Army%20Mod%20Plan%202007.pdf>; retrieved 6 July 2007.

³⁰ "*The Objective Force White Paper*." Office of the Chief of Staff, Army (Washington: 2001).

³¹ Ibid.

In 2001, the achievement of these characteristics was largely based in the development and fielding of new equipment to enable a strategic response to crises anywhere in the spectrum of conflict. However, two of the characteristics, agility and versatility, will be founded not on technology, but in the human dimension; the development of leaders and soldiers capable of innovation and creativity. Recognizing the importance of soldiers and leaders as a foundation of change, the *Objective Force White Paper* states that professional education must develop more knowledgeable and competent commanders and junior leaders. Creating the objective force warrior in 2001, however, was based in technology. Web-based command and control systems and distributive learning techniques are prescribed to reduce decision time and provide information dominance in any environment. Collaborative planning and rapid dissemination of orders would maximize time to prepare for and synchronize operations at the tactical level. New technology would enable the leader to “see” the battlefield with unparalleled fidelity and understanding, at the lowest levels possible. Our reliance on new technologies, equipment and methods served the Army well in the routing of the Taliban in 2001-2002 and the destruction of the Iraqi regime in the Spring of 2003. A technical and structural focus in transformation has indeed served to increase lethality, deployability, versatility, sustainability, agility, responsiveness and survivability. Since then, however, technology and equipment have proven themselves an incomplete prescription for fighting in ambiguous environments against a dedicated enemy intent on attacking our weaknesses, asymmetrically. In fact, one could make the argument that an over-reliance on technology is one of our weaknesses, easily defeated by simple, low-technology tactics, techniques and procedures (TTP's).

Technology, structure and equipment, for all their virtues, cannot provide the contextual understanding of the conflict in which young leaders will undoubtedly find themselves. Nor can technology make the decision for the leader. A valuable lesson learned from our current struggles in Afghanistan and Iraq is the primacy of the human dimension. More than technology or weapons,

a well-educated leader, who can critically analyze the situation, make timely decisions in the face of ambiguity and fully understand the consequences, will be critical for success.

With transformation in terms of organization, doctrine and materiel moving swiftly, the Chief of Staff of the Army (CSA) turned to leaders, and in June of 2000 chartered the Army Training and Leader Development Panels (ATLDP) to make an assessment of current education systems for non-commissioned officers, civilians, warrant officers and commissioned officers, and provide recommendations for change in order to develop leaders more capable of functioning in the operating environment in the first part of the new century. The panel released four reports, of which, the Phase III report assessed and made recommendations for change to the officer education system. The panel compiled data from surveys and interviews with over 10,000 officers of all grades to produce the report. In plain terms, the officers in the field summarized their concerns in several aspects of professional service to include education, culture, training and quality of life. With respect to education, junior officers indicated that their military service was not meeting their expectations. Specifically, they felt that they were not receiving adequate leader development experiences, lack of trust was causing pervasive micromanagement, personnel management priorities in terms of operational assignments were at the expense of developmental experiences and the Officer Education System (OES) was not providing them with the skills needed for success in full spectrum operations.³² The officer development weaknesses are apparent to junior officers in both operational experience and institutional learning. The Army's "up-or-out" promotion system creates a development problem by requiring all officers of a particular field to hold the same types of jobs before being eligible for promotion.³³ DA Pam 600-

³² "The Army Training and Leader Development Panel Officer Study Report to the Army," Headquarters, Department of the Army, Washington, DC, May 2001; available from <http://www.army.mil/features/ATLD/report.pdf>; retrieved 30 March 2007.

³³ Donald E. Vandergriff, *Raising the Bar: Creating and Nurturing Adaptability to Deal with the Changing Face of War* (Washington, DC: Center For Defense Information, 2006), 67.

3, *Commissioned Officer Development and Career Management*, is the governing document that requires officers to meet these career “gates” prior to being considered for promotion. To meet this requirement, the personnel management system is designed to give everyone the same opportunity at specific jobs, significantly reducing the length of time that a young officer spends doing any one job. The second order effect is a lack of trust by commanders based on junior officer’s limited experience, leading to micromanagement. The second weakness lies in the level of preparedness that young officers feel after completing the required institutional courses. While being told of their need to be effective in the full spectrum of conflict, education, both pre- and post-commissioning, focuses disproportionately on major combat operations (MCO). The panel submitted eighty-nine recommendations at the conclusion of their study, the most significant of which were the recommended changes in the officer education system. “The Panel’s work provides compelling evidence that a main effort in Army transformation should be to link training and leader development to prepare Army leaders for full-spectrum operations.”³⁴

Because the ATLDP report was published prior to 9/11, the Director of the Army Staff, in a follow-up initiative, under authority from the CSA and Secretary of the Army created the Review of Education, Training and Assignments for Leaders (RETAL) task force on 6 July 2005 to examine the policies governing education, training and assignments for officers, non-commissioned officers, warrant officers and civilians. The study also served to validate the pre-9/11 ATLDP recommendations. The task force conducted their study from October 2005 through June 2006 and released a final report of recommendations, along with the Army *Pentathlete* Leader model. The RETAL task force recommendations included expanding competency to full spectrum, including non-kinetic expertise, broadening the full spectrum culture and addressing gaps in mental agility, cultural awareness, governance, enterprise management and

³⁴ “The Army Training and Leader Development Panel Officer Study Report to the Army,” Headquarters, Department of the Army, Washington, DC, May 2001; available from <http://www.army.mil/features/ATLD/report.pdf>; retrieved 30 March 2007.

strategic leadership.³⁵ The RETAL recommendations, in conjunction with the validated recommendations of the ATLDP were released in October 2006 in a new document, *Army Leaders for the 21st Century (AL21) Implementation Guidance*; an integrated plan to improve the leader development process.³⁶ In short, the Army has begun to realize the strain that the current operating environment places on young leaders who are ill-prepared for full spectrum conflict resulting from antiquated education system steeped in conventional thought and based primarily on repetitive task training. The 2007 Army Posture Statement summarizes the AL 21 report in stating that

we recognize that intellectual change precedes physical change. For this reason, we are developing qualities in our leaders, our people, our forces – and the institutions which generate and sustain them – that will enable them to operate effectively amidst uncertainty and unpredictability. We describe the leaders we are creating as “*pentathletes*,” whose versatility and agility– qualities that reflect the essence of our Army – will enable them to learn and to adapt to new situations in a constantly evolving environment. To ensure that our Soldiers are well led, we are now actively implementing the findings of a comprehensive review focused on how we train, educate, assign, and develop our officers, noncommissioned officers, and civilian leaders.³⁷

Identifying the problem, however, is the easy part. Developing the strategy to create the Pentathlete leader is harder. Still more difficult is implementing that strategy. The current strategy to create the Pentathlete leader centers on the Army school system, on-the-job training (operational development) and self-development. While there are strengths in the Army’s implementation plan, it lacks development of pre-commissioning education systems and focuses too heavily on the Major (O4) and above ranks, when character and mental attributes have already been defined by the organization,

³⁵ “Army Leaders for the 21st Century, Final Report.” Washington, DC: Office of the Deputy Chief of Staff, G-3/5/7, Army. November 2006; available at <http://cpol.army.mil/library/train/docs/AL21-Final.pdf>, retrieved on 2 April 2007.

³⁶ “Army Posture Statement.” Washington, DC: Office of the Chief of Staff, Army. 2007.

³⁷ “2007 Army Posture Statement,” Executive Office of the Headquarters Strategy Group, 14 February 2007; available from <http://www.army.mil/aps/07>; retrieved 20 March 2007.

making change more difficult.³⁸ The Army junior officer education system is, for many leaders, a training system, not an education system. Junior and future officers learn critical skills through repetition and memorization. Central to the problem in creating adaptive, Pentathlete leaders is the lack of emphasis on the institutional learning domain, specifically, pre-commissioning. The cognitive and emotional development, self awareness and intuition required of an adaptive and agile leader take years to develop, much longer than can be accomplished in any post-commissioning, short duration course. Without a firm ground in institutional development, achieving success in the operational or self-learning domains will be hampered. A leaders' ability to learn in these domains is dependent on their earlier development of the skills critical to adaptability and agility.

B. DOMAINS OF LEARNING

The Army Leader Development program revolves around three “domains” of learning. These domains are intended to interact and provide the types of feedback and assessments necessary to create the type of leader required for the current and future operational environments. The endstate is readiness for warfighting, in any environment. Each of the domains is designed to include measurable actions that must occur to successfully develop Army leaders, of all ranks.³⁹

The institutional domain is the first learning domain that future officers enter. It includes the civilian and military education schools and Joint service schools.⁴⁰ The focus of this domain is on education, or “how to.” It is intended to provide the young officer or future officer with the tools required to successfully and effectively continue learning in the operational domain. Without a solid

³⁸ Vandergriff, 24.

³⁹ “2007 Army Posture Statement,” Executive Office of the Headquarters Strategy Group, Department of the Army (Washington, 14 February 2007), 37; available from <http://www.army.mil/laps>; retrieved 20 March 2007.

⁴⁰ “2007 Army Posture Statement,” Executive Office of the Headquarters Strategy Group, Department of the Army (Washington, 14 February 2007), 37; available from <http://www.army.mil/laps>; retrieved 20 March 2007.

bedrock of institutional learning, development in the operational domain will be hampered by an inability to recognize the lessons to be learned or misinterpretation of feedback. The ROTC and West Point curricula are examples of learning in the institutional domain, as are follow on Basic Officer Leadership Courses. Regardless of the forum, the institutional domain is responsible for teaching leaders Army doctrine and tactics, techniques and procedures (TTP's). For junior officers, the Officer Education System (OES) is comprised of a three part series of instruction called the Basic Officer Leadership Course (BOLC). BOLC I, II and III comprise the Initial Military Training (IMT) of OES. BOLC I is the officers pre-commissioning training, conducted through either ROTC or the United States Military Academy. BOLC II is the first training that officers attend after commissioning and is intended to enhance confidence and mastery of tasks associated with inculcating a "warrior ethos." BOLC III is branch specific technical training required of officers in their specialty branch, i.e. infantry, armor, quartermaster.⁴¹ Completion of all three is required before an officer enters the force.

The second domain is the operational. This domain includes all the actions and learning experiences that are generated while serving in the warfighting force. The operational domain is the learning environment in which young officers find themselves when they reach their first few assignments. At their units, officers participate in day-to-day operations and sustainment, training individual and collective skills necessary for mission accomplishment, training rotations at Combat Training Centers (CTC's), field exercises and combat deployments. The primary source of feedback includes evaluation, counseling and mentorship from commanders, peers and subordinates. This feedback is intended to provide a young officer with assessment of his performance, identification of skills, knowledge and attributes necessary for success, and areas of needed improvement. This provides the officers with an understanding of how

⁴¹ Cadet Command Regulation 145-3, *Reserve Officer Training Corps Pre-commissioning Training and Leadership Development*, United States Army Cadet Command (Fort Monroe, VA: 20 September 2006), 2-2.

to better apply what they've learned to the situation in which they find themselves. In lay terms, one might refer to this domain as "on-the-job" training, or OJT. In the Army of today, most of what we learn about warfighting is generated in this domain. It is heavily oriented on task training and successful performance of those tasks in the combat environment

The final learning domain is self-development and is "based on a feedback-driven process of activities and learning that contributes to professional competence, organizational effectiveness, and personal development to enhance potential to succeed in progressively complex, higher-level responsibilities."⁴² The intent of self development is to augment and accelerate the learning developed earlier in the institutional domain and day-to-day actions in the operational domain. Critical to the success of self-development is the active participation of senior commanders in the mentorship and counseling of young leaders to orient their self-development activities. Advanced civilian degrees exemplify one important component of officer self-development, but Army policy typically restricts graduate school attendance to mid-career officers, either seasoned captains or majors.

1. Pre-commissioning Education in the Institutional Domain

There are two main sources of education for the commissioning of officers in the U.S. Army: ROTC and the United States Military Academy at West Point (USMA). Both require a curriculum of military studies in addition to traditional undergraduate coursework, and result in the award of a baccalaureate degree and commissioning as a Second Lieutenant. A third source of commissioning, the Officer Candidate School (OCS), produces far fewer Second Lieutenants than the others. OCS candidates are service members who have served in the field as enlisted soldiers, and have, at some point, nearly completed

⁴² "2007 Army Posture Statement, Annex C, Training and Leader Development," Executive Office of the Headquarters Strategy Group, Department of the Army (Washington, 14 February 2007), 37; available from <http://www.army.mil/aps/07>; retrieved 20 March 2007.

undergraduate education. Since we cannot alter the education that these candidates have already received, often prior to entering service and attendance in OCS, it will not be addressed in this study.

a. Reserve Officer's Training Corps (ROTC)

ROTC was born in 1916 when President Wilson signed the National Defense Act.⁴³ Initially created to fill wartime gaps in production when USMA could not sustain the World War I build-up of forces, ROTC is now the major source of the Army's officer corps. Commissioning 4050 second lieutenants in 2007, ROTC now accounts for roughly 75% of all commissioned officers. Sixty percent of ROTC graduates go on to serve the Active Army, while the rest enter the U.S. Army Reserve or National Guard.⁴⁴ The total number of cadets and institutions offering ROTC has ebbed and flowed over the years, commensurate with the Army's build-up or draw-down of forces. Today, Army ROTC is offered on 273 campuses around the country, with 26,000 students enrolled.⁴⁵

U.S. Army Cadet Command, responsible for the development and implementation of Army ROTC is structured in two geographic regions, East and West. Regions are subdivided into Brigades, with eight brigades in the Western Region and six in the Eastern. Brigades are further sub-divided into battalions, with each school having that designation; there are 273 ROTC battalions, one for each school having an ROTC program. Staffing these battalions are approximately 2.7 officers per battalion and a total of 680 contract cadre. Each school or "battalion" is commanded by a Major or Lieutenant Colonel, either on active duty or in the reserves.

⁴³ United States Army Cadet Command Headquarters [website]; available from <http://www.rotc.usaac.army.mil/history.html>; accessed 11 October 2007.

⁴⁴ "ROTC: *The and Now*," [Briefing], United States Army Cadet Command, Office of the G-5, (Fort Monroe, VA: 6 August 2007).

⁴⁵ Ibid.

Army ROTC offers scholarships as incentive for entry into the program. These scholarships range in duration from 2 to 4 years and pay for most college expenses, though there is a cap of \$20,000 per year, per student. Therefore, scholarships to schools with more expensive tuition may not cover all costs of attendance. Currently, there are no requirements as to what field of study a cadet must pursue; only that it results in a baccalaureate degree. Graduating scholarship cadets owe eight years of service; those going to the Active Army will spend at least four of those years on active duty, with the remainder in the Army Reserve or Individual Ready Reserve (IRR). Graduates going immediately to the Army Reserve or National Guard typically spend all eight years in those organizations.

The PME in ROTC is broken down into four parts, all of which constitute BOLC I: baccalaureate degree, completion of military science and leadership (MSL) advanced classes (the four taken during the junior and senior year), the Leadership Development and Assessment Course (LDAC) and the Enhanced Skills Training Program (ESTP). LDAC is a 33 day long summer course at Fort Lewis, WA. The LDAC mission is to train cadets to Army standards, develop leadership, and assess officer leadership potential. "LDAC is the single most important training event in the career of a cadet. It is often their first exposure to Army life on an active Army installation and one of the few opportunities where cadets from various parts of the country undergo a common, high-quality training experience."⁴⁶ ESTP "assesses and develops ROTC cadet's communication, problem solving and analytical skills through diagnostic adaptive assessments and skills enhancement training in basic mathematics, English grammar, and reading."⁴⁷ The ESTP is an online assessment tool and is generally completed by cadets during their second or third years of school.

⁴⁶ Cadet Command Regulation 145-3-1, *Reserve Officer Training Corps Pre-commissioning Training and Leadership Development, Off-campus Training*, United States Army Cadet Command (Fort Monroe, VA: 23 January 2006), 1-5.

⁴⁷ Cadet Command Regulation 145-3, *Reserve Officer Training Corps Pre-commissioning Training and Leadership Development*, United States Army Cadet Command (Fort Monroe, VA: 20 September 2006), 2-2.

The ROTC curriculum is broken down into four years of instruction, Military Science and Leadership (MSL) levels I-IV, corresponding to the four years of undergraduate study. MSL I cadets are typically freshman, while MSL IV cadets are seniors. Cadets may enter the ROTC program as late as the end of their sophomore year, often applying for 2-year scholarships. These cadets must attend the Leader's Training Course (LTC) in the summer before their junior year of school. The purpose of this training is to bring cadets up to speed with others who've already completed MSL I and II courses as a freshman and sophomore, respectively. About 1,200 cadets enter ROTC as two year scholarship winners and attend this training every year.⁴⁸

In each semester of undergraduate study, cadets take one of the eight MSL courses. Most schools offer elective credit for having completed the MSL course. In addition to the MSL classes, cadets participate in a leadership lab every week, focused on skill training related to the MSL class. Classes are typically 1-2 hours a week, with the leadership lab adding another two. Each MSL class contains 12 lessons, with divided focus areas in leadership, personal development, officership, tactics and techniques, values and ethics and evaluation.⁴⁹ The advanced level courses, MSL 301, 302, 401 and 402, are all conducted during the final two years of schooling. They challenge cadets to study, practice and evaluate adaptive leadership skills by placing them in challenging, complex leadership scenarios, using squad tactical operations as a vehicle.⁵⁰ Junior and senior cadets also fill leadership positions within the cadet battalion and assist cadre in the development of courses and evaluation of younger cadets. Cadets also participate in two field training exercises (FTX) per year; one in each semester. These exercises are typically conducted at a nearby

⁴⁸ "ROTC: The and Now," [Briefing], United States Army Cadet Command, Office of the G-5, (Fort Monroe, VA: 6 August 2007).

⁴⁹ Cadet Command Regulation 145-3, *Reserve Officer Training Corps Pre-commissioning Training and Leadership Development*, United States Army Cadet Command (Fort Monroe, VA: 20 September 2006), 2-2.

⁵⁰ "MSL Course Overview Pony Blanket," [slideshow], U.S. Army Cadet Command (Fort Monroe, VA: Summer, 2007).

military installation and range in duration from 24 to 96 hours. During these exercises and the weekly leadership labs, all cadets must receive training on 85 tasks that are required on the BOLC Common Core Task List. Tasks range from marksmanship, to medical training, to dealing with the media. Each task must be performed to a published standard and evaluated prior to commissioning.⁵¹

ROTC education has evolved significantly over the years, with the most recognizable changes in number of institutions providing ROTC and core curricula. ROTC units are down to 273 from over 400 during the 1980's and cadre numbers are down to 2.7 per cadet battalion, from 5.2 per battalion 20 years ago. In downsizing, Cadet Command has been able to better standardize the education that future officers receive and better focus the efforts of its smaller cadre force. The primary challenge of ROTC remains the amount of time available for instruction. Compared to USMA cadets, ROTC cadets spend far fewer hours of their 4 year undergraduate career in direct contact with military cadre and military training. Continuing to provide for adequate military education will depend on prioritization, making the best use of this most precious asset.

b. The United States Military Academy at West Point (USMA)

The history of the United States Military Academy at West Point began in 1802 when President Jefferson signed legislation mandating its creation. Since that time it has commissioned over 50,000 officers into the U.S. Army.⁵² Today, the academy graduates and commissions roughly 900 active duty lieutenants each year, 25% of all lieutenants.⁵³ All graduates receive a

⁵¹ The BOLC Common Core task list is intended to provide a foundation of skills necessary to continue in BOLC II, after commissioning. The 85 tasks are subdivided into those that are deemed critical, important and "as time permits."

⁵² United States Military Academy [website]; available from <http://www.usma.edu/history.asp>; accessed 10 October 2007.

⁵³ Ibid.

Bachelors of Science degree and can major in one of several programs. Upon graduation, USMA cadets are required to serve on active duty in the Army for a period of five years.

Admission to USMA is open to men and women who've received a nomination from a Congressman or the Department of the Army and have met the academic, physical and medical requirements. Each year, USMA admits 1,150 to 1,200 cadets into the freshman class.⁵⁴ Academic evaluation for incoming students is based, like most colleges, on high school record and either the SAT or ACT score. The Academy also makes assessments on character and leadership potential. The physical and medical requirements mark the key difference in USMA admissions as compared to its civilian counterparts.

The mission of USMA is "to educate, train and inspire the Corps of Cadets so that each graduate is a commissioned leader of character committed to the values of Duty, Honor, Country; professional growth throughout a career as an officer in the United States Army; and a lifetime of service to the Nation."⁵⁵ To accomplish this, the Academy has instilled three formal programs that constitute the Cadet Leader Development System: the academic program, the military program and the physical program.⁵⁶

The academic program seeks to broadly educate leaders for lifelong service who can anticipate and respond effectively in the changing security environment. The core curriculum for all cadets includes 26 core classes, an information technology class and a three class engineering sequence for non-engineering majors.⁵⁷ In addition to the core course offering, cadets may

⁵⁴ United States Military Academy [website]; available from <http://admissions.usma.edu/overview.cfm>; accessed 10 October 2007.

⁵⁵ "Educating Future Army Officers for a Changing World," United States Military Academy, Office of the Dean of the Academic Board [website]; available from <http://www.dean.usma.edu/support/aad/EFAOCW.pdf>; accessed 5 October 2007.

⁵⁶ Ibid., 7.

⁵⁷ "Academic Program, Curriculum and Course Descriptions," United States Military Academy, Office of the Dean, 6 June 2007; available from <http://www.dean.usma.edu/sebpublic/curricat/static/index.htm>; accessed 2 October 2007.

choose a field of study or major, offering an additional 10 to 18 elective courses. Much of the core curriculum is accomplished in the first two years of education, making the early experience of cadets relatively common amongst all. The core curriculum requires all cadets to complete classes in chemistry, computer science, economics, English, foreign languages, history, international relations, law, leadership, literature, math, military history, philosophy, physics, geography, and political science. This core provides a breadth of knowledge and understanding on which to build with specific studies pertaining to the major or field of study chosen. USMA offers more than 30 disciplines in which to major or select as a field of study.

The military program consists of study in military science, joint professional military education (JPME) and military training, to include summer training. The goal of military science studies is to develop the foundational military skills and troop leading procedures required of junior officers.⁵⁸ Each cadet must complete a core military science curriculum of eight courses, including introduction to the Army, warfighting, tactics, combined arms operations and tactical leadership. Additionally, cadets can choose a major in Military Arts and Science by completing 10 military courses in addition to the required eight core courses. Three of the ten are required, the remaining seven are chosen from 32 available electives. Military Arts and Sciences majors may also choose a specialty track in either operations or irregular warfare. The JPME program is designed to familiarize cadets with the structures and capabilities of other services and joint force structures.⁵⁹

The military training portion of the curriculum introduces and evaluates basic military skills and is predominantly conducted in the summer before their first year and in the summers between subsequent school years.

⁵⁸ United States Military Academy, Department of Military Instruction, Military Science [website]; available from http://www.usma.edu/dmi/military_science.htm; accessed 20 September 2007.

⁵⁹ United States Military Academy, Department of Military Instruction, Military Science [website]; available from <http://www.usma.edu/dmi/jpme.htm>; accessed 7 September 2007.

Cadet Basic Training (CBT) and Cadet Field Training (CFT) are conducted prior to the first and second years of school, respectively. During these training periods, cadets learn and perform military tasks such as foot-marching, land-navigation and marksmanship. All military training conducted while at USMA constitutes the Basic Officer Leadership Course I, including the same 85 tasks required by ROTC.

The physical program is designed to “develop warrior leaders of character who are physically and mentally tough by engaging cadets in activities that promote and enhance a healthy lifestyle, physical fitness, movement behavior, and psychomotor performance.”⁶⁰ Physical education is a USMA requirement during all four years of study at the academy. Freshman cadets complete courses in combatives, boxing (men only), self defense (women only), swimming and military movements (gymnastics). In addition to the required courses, cadets must compete in a competitive sport through intramurals, clubs or as a member of the Army team. The purpose of the freshman curriculum is to establish a baseline of physical abilities required of military service. In their second year, cadets add wellness to the physical education (PE) curriculum, learning about health-related issues and quality of life. As in all other years, cadets must continue to compete in competitive sports. Adding lifetime sports and unit fitness to the curriculum in upper class years, cadets complete what is called the Master Fitness Trainer program. The Department of Physical Education Lifetime Sports Program is “designed to develop a foundation of skills, knowledge, and personal attributes, which will enable cadets to successfully participate in lifetime sports, provide motivation for continued improvement and establish a pattern of physical activity for a lifetime.”⁶¹

The three programs, academic, military and physical, combine to form the core of the Cadet Leadership Development System (CLDS). The quote

⁶⁰ United States Military Academy, Department of Physical Education [website]; available from <http://www.usma.edu/dpe/vision.html>; accessed 3 October 2007.

below summarizes the overall, fluid process that constitutes the CLDS. It is designed for production of the ideal officer for service in the Army; articulated in the *USMA Vision 2010* as “prepared for ambiguity and uncertainty and understanding of the unique characteristics of the profession and the principles that govern the fulfillment of their office.”

The Cadet Leader Development System is an organizing framework designed to coordinate and integrate cadet developmental activities across the entire West Point Experience. CLDS is theoretically informed, goal-oriented, and continuously assessed. It is designed to organize cadets’ experiences so that USMA achieves its institutional goals, accomplished its assigned mission, and realizes its strategic vision. Informed by Army traditions and proven concepts about how to develop officers, CLDS provides the structure, process, and content for cadets’ 47-month journey from “new cadet” to “commissioned leader of character.”⁶²

2. Post-commissioning Education in the Institutional Domain

Upon commissioning, new lieutenants enter the second and third parts of their professional education, known as BOLC I and BOLC II. These courses constitute the final training requirements of young officers before they enter the field. The focus of BOLC II and III is training the skills required of Army officers in general, and those tasks necessary for specific branches.

BOLC II is a six week training program conducted at Fort Benning, GA, or Fort Sill, OK. The courses are branch immaterial and are intended to inculcate the *Warrior Ethos* by training new lieutenants in basic combat skills. The mission of BOLC II is to “develop competent, confident and adaptable Lieutenants, grounded in warrior tasks, able to lead Soldiers in the contemporary operational environment.”⁶³ The course design is that of task repetition in order

⁶¹ United States Military Academy, Department of Physical Education [website]; available from <http://www.usma.edu/dpe/vision.html>; accessed 3 October 2007.

⁶² USMA Circular 1-101, United States Military Academy (West Point, NY: June 2002), 1.

⁶³ “BOLC II Overview,” [Slideshow presentation], available from <https://www.benning.army.mil/BOLC/>; accessed 31 March 2007.

to gain task understanding. Immersion in the tasks and the learning environment is accomplished by conducting the training predominantly in the field. 80-90% of the six week training program is conducted in field training exercises.

Lieutenants are organized into platoons of approximately 40 personnel, each platoon being trained by experienced officers and non-commissioned officers, 5-6 per platoon. Throughout the course, lieutenants gain task understanding of 39 core tasks, divided into key categories of shoot, move, communicate, joint urban operations and fight. The conduct of many of the tasks comes in the form of a situational training exercise (STX) that is essentially a vignette of the contemporary operating environment (COE). In other words, new lieutenants are placed in situations that closely resemble those that lieutenants will face in combat, and in this situation, with mental and physical stressors, they will perform and be evaluated on several of the core tasks.

While most of the 39 core tasks are individual in nature, lieutenants eventually execute them collectively, with lieutenants rotating positions of leadership (team leader, squad leader, platoon leader and platoon sergeant). During the course, each lieutenant is evaluated in four different leadership positions. As an example, all lieutenants will individually learn to fire their weapon and move under direct fire from an armed enemy. Later, they will train as squads, with lieutenants performing the duties of squad and team leaders. The squad will execute a collective training event, employing the individual skills learned earlier. This time, their direction is provided by a peer lieutenant being evaluated as the squad or team leader. The lieutenant-comprised squad will perform and be evaluated on nine of these "warrior battle drills," each one requiring the use of several of the 39 individual core tasks. To better replicate the COE, the FTX's are conducted from a forward operating base (FOB), much like those used in Iraq and Afghanistan today. While in the FOB, lieutenant squads and platoons will be responsible for security, controlling traffic, managing casualties, patrolling and providing a quick reaction force for other elements engaged in combat. The culminating event is a live-fire exercise that replicates a

mounted patrol being ambushed (with IEDs) by the enemy. This approach allows lieutenants to gain a better understanding of what life will be like when they deploy to combat zones.

To aid in the instilment of the “warrior ethos,” lieutenants in BOLC II will undergo a rigorous physical training regiment to include combatives (hand-to-hand combat), foot marches and “battle-focused” physical training such as obstacle courses and confidence courses. Lieutenants will lead all physical training activities. Physical training is a central part of the BOLC II experience and is conducted nearly everyday, including while in the field.

In the end, BOLC II provides improved understanding and expansion of the core skills learned in BOLC I. It is designed to immerse them in an environment that closely resembles what they’ll soon face overseas. The tasks performed introduce officers of all branches to the basic skills needed to be performed in direct contact with the enemy. The endstate is “an Officer who is trained in warrior tasks and the warrior Battle Drills, who is self-aware and adaptable; an Officer who will not accept defeat and will never quit, who demonstrate the characteristics of an Army leader while living the Army Values; and who embodies the warrior ethos.”⁶⁴ The foundation of combat skills now trained in all officers, they move next to BOLC III, where they will gain additional skills required of their primary branch.

BOLC III differs significantly from prior educational courses for the majority of lieutenants. In BOLC III, officers continue their education by learning the specific technical and tactical skills of their branch. Each of the 16 Army branches has a BOLC III course and range in duration from 6 to 16 weeks. The individualized course curricula focus the officers learning on specialized tasks. For instance, infantry officers continue to learn tactics, techniques and procedures for conducting infantry type missions, ranging from varying types of raids and attacks to defensive operations. Field artillery officers will train on the

⁶⁴ “BOLC II Overview,” [Slideshow presentation], available from <https://www.benning.army.mil/BOLC/>; accessed 31 March 2007.

tasks associated with controlling, allocating and directing fire support to infantry and armor units such as cannon artillery, rockets and close air support from fixed and rotary wing aircraft. Completion of BOLC III constitutes the completion of the initial military training (IMT) portion of OES. When officers graduate their respective courses, they are considered prepared to enter the warfighting force and will shortly thereafter report to their units and transition to learning in the operational domain.

THIS PAGE INTENTIONALLY LEFT BLANK

IV. ANALYSIS, RECOMMENDATIONS AND CONCLUSIONS

The analysis of the current officer education system, specifically in the institutional domain of initial military training, is fundamentally based on the development of the qualities of the “Pentathlete” warrior; qualities deemed essential in officers preparing to fight the wars of today and tomorrow. Army senior leadership, in the *2007 Army Posture Statement*, qualitatively defines the Pentathlete leader as multi-skilled and possessing specific leader attributes:

Skills

- Strategic and creative thinker.
- Builder of leaders and teams.
- Competent full-spectrum warfighter and accomplished professional who supports the soldier.
- Effective in managing, leading and changing organizations.
- Skilled in governance, statesmanship and diplomacy.
- Understands cultural context and works effectively across it.

Attributes

- Sets the standard for integrity and character.
- Confident and competent decision-maker in uncertain situations:
 - Prudent risk-taker.
 - Innovative.
 - Adaptive.
 - Accountable.
- Empathetic and always positive.
- Professionally educated and dedicated to life-long learning.
- Effective communicator.

This leader “personifies the Warrior Ethos in all aspects, from warfighting to statesmanship to enterprise management...it’s a way of life.”⁶⁵ In short, the analysis will assess how well we educate officers to become Army leaders in the 21st Century, or “Pentathletes.”

A. RESERVE OFFICER TRAINING CORPS

The U.S. Army Cadet Command faces perhaps the most daunting challenge in educating cadets for future service as Army officers. Not only is ROTC charged with producing 75% of the lieutenants entering service each year, but it must do so with the least available time. The challenge is compounded by the very breadth of the system, encompassing 26,000 cadets on more than 273 campuses around the country. Despite the challenges, ROTC has made huge strides in improving the quality of the education and therefore, the quality of the lieutenant that enters BOLC II, BOLC III and the force. The Reserve Officers Training Corps has overcome the hurdles of standardization among the several hundred universities to produce consistent, expected results, but problems remain.

1. Strengths and Improvements

One of the greatest strengths of the ROTC system is its diversity. ROTC recruits cadets from all walks of life, in every state in the union. Diversity among cadets helps to create an understanding of the differences among people and their backgrounds; providing foundational understanding of the cultural differences that they will face while operating in other nations. Diversity has improved since joining U.S. Army Cadet Command and U.S. Army Recruiting Command under one Accessions command. This merging of commands has produced synergy in recruiting efforts and eases the burden of recruiting. ROTC no longer competes against recruiters for candidates.

⁶⁵ “2007 Army Posture Statement, Annex C, Training and Leader Development,” Executive Office of the Headquarters Strategy Group, Department of the Army (Washington, 14 February 2007), 39; available from <http://www.army.mil/aps/07>; retrieved 20 March 2007.

ROTC has always been faced with the challenge of standardization among colleges. Until recently, U.S. Cadet Command issued broad, “endstate” guidance that was to inform ROTC battalions on what type of skills and qualities were required of an officer at the time of graduation. In recent years, Cadet Command has published detailed guidance on the knowledge, skills and attributes to be developed, when to develop them and in what context. This “pony blanket” lays out the entire four year ROTC curriculum and standardizes it across the command. The freshman cadet at Penn State now participates in the exact same curriculum as a freshman cadet at Texas A&M. No longer do cadet battalions have the autonomy to tailor the curriculum based on the experience, ideals and desires of their respective cadre.

Recent overhauls of the curriculum have added leadership as an essential focus area for the military education of cadets; an area that, historically, was addressed very little. The curriculum now requires formal military leadership education in each semester of the four year program. In a progressive approach, freshmen are introduced to Army leadership and the values, attributes and skills required of effective officers. In their sophomore year, they address leader traits and behaviors, leadership theory, teambuilding, adaptive leadership, transformational leadership and situational leadership. Advanced course cadets (those in their final two years) will study leadership behaviors, peer leadership, leadership and culture, team dynamics and motivation. Informally, advanced course cadets will serve in leadership roles within their respective battalions. Performing the duties of a squad leader or staff officer help cadets to experiment with different leadership styles and analyze their own leadership traits and tendencies, while mentoring younger cadets.⁶⁶ In short, they learn to lead in a risk-free environment.

⁶⁶ Robert T. Stein, “An Assessment of Reserve Officer Training Corps’ Program of Instruction for Future Officers,” [Masters Thesis] (Fort Leavenworth, KS: Command and General Staff College, 2002), 60.

Another significant strength of the program is the opportunity afforded cadets to seek military training during summer months. Several ROTC cadets, about 20%, have the opportunity every year to attend Airborne School, Air Assault School and Mountain Warfare School. Still others can participate in the Cadet Troop Leadership Training (CTLT) program where they serve in an active duty unit and perform the role of platoon leader for approximately a month in the summer before their senior year. Here they are supervised and mentored by lieutenants and captains and are provided an officer evaluation report (OER) as feedback on their performance. Not only do cadets learn valuable skills by attending such training, but they also develop a keen sense of Army culture and get a glimpse of the Army life.

Lastly, the ROTC program brings the military and private sector to a closer relationship. Unlike USMA, ROTC cadets spend their time, both in and out of class with everyday civilian students, not in isolation from them. Cadets can interact academically and socially with anyone on campus, bringing a better understanding of the military to them. This interaction also keeps ROTC cadets informed of how they and the military are perceived by many Americans. These civil-military relations can translate to an increased ability of ROTC cadets to understand and handle civilian interactions with a native populace and the media.

2. Challenges

Despite recent advancements in the quality of the curriculum, ROTC's ability to adequately provide the type of education required of junior officers in the COE is not yet fully developed; and the challenges are numerous. Some challenges may be beyond the control of Cadet Command, while others may be the result of curriculum design, instructor capability and focus.

One of the fundamental challenges facing ROTC is that of recruitment. In 2007, ROTC had a mission of producing 4,500 new lieutenants, but produced only 4,050. ROTC cadre and recruiters must continually seek out candidates to fill needed slots in the cadet ranks. This challenge has the potential to bring less

than optimal cadets into the program, including those who only desire to participate in order to pay for school. This type of cadet tends to participate only minimally and can affect the overall quality of the end product, the commissioned second lieutenant.

Cadets do not major in ROTC and as such, ROTC is perceived by some students as more of an “add-on” to their undergraduate curriculum and not a central component of it. Civilian education requirements of the school take priority and ROTC has no input in the types of classes in which cadets enroll or their respective schedules. In this sense, there is no way for Cadet Command to ensure that a cadet’s major and associated curricula are best preparing them for military service. Cadets are free to choose the major and electives that best serve them, and not necessarily the Army. In fact, some cadets may enroll in classes whose subject matter and professors may be opposed to military service and the mission of the Army.⁶⁷ This fact, though negative on the surface, may actually help to foster a better understanding of civilian perceptions. Additionally, a cadet whose major is marine biology, for instance, may not enroll in any course that provides significant enhancement of their ability to lead soldiers on the battlefield. A cadet in this circumstance may develop none of the skills and attributes of a Pentathlete leader through attainment of a baccalaureate degree. In this case, nearly every aspect of preparation for Army leadership falls in the hands of a few cadre, with limited time outside of the civilian curriculum to introduce the material and develop the knowledge, skills and attributes required.

Time, then, becomes a major obstacle faced by ROTC cadre in developing cadets into Pentathlete leaders. On average, freshman cadets spend 2.5 hours per week in the ROTC curriculum, sophomores spend 3.5 hours and juniors and seniors spend 4.5 hours.⁶⁸ This hourly average may vary depending on the institution. This provides for a cumulative average of 30 hours per

⁶⁷ Robert T. Stein, “An Assessment of Reserve Officer Training Corps’ Program of Instruction for Future Officers,” [Masters Thesis] (Fort Leavenworth, KS: Command and General Staff College, 2002), 63.

semester for freshman and up to 54 hours per semester for seniors. In terms of a 40 hour work week, this amounts to a week and a half per year for freshman and two and a half weeks per year for seniors. Even when the one-per-semester FTX's are added in, this only adds another work week to the curriculum. While cadets are encouraged to participate in extracurricular ROTC activities, they are not mandatory and not all cadets are willing or able to spend the extra time. If a cadet were to add up the total time spent in professional military education, he or she would find that over four years, they would have spent only 16-17 weeks, including the mandatory LDAC between their junior and senior years. Given such time constraints, prioritization of the ROTC curriculum becomes paramount.

So, we must ask how well Cadet Command has prioritized the curriculum in order to produce the skills and attributes of the Pentathlete leader, noted at the beginning of this chapter. Analyzing the ROTC 8 core curriculum classes and corresponding labs will show that cadets spend 60.5 of 360 instruction hours (16.8%) on what Cadet Command considers leadership training, 17 of 360 (4.7%) on personal development, 44.5 of 360 (12.4%) on officership, 188 of 360 (52.2%) on tactics and techniques, 16 of 360 (4.4%) on values and ethics and 25 of 360 (6.9%) on overview and assessment.⁶⁹ This course breakdown clearly indicates that tactics and techniques have greater priority within the ROTC curriculum than all other development areas combined. The fundamental flaw of this design is that pre-commissioning officer education looks more like task training than education. ROTC places the burden of education on the civilian institution, on whose curriculum ROTC has no input.

The execution of collective task training in which cadets are placed in leadership positions and evaluated, often by senior level cadets, does enhance the leadership learning experience of the exercise. But collective task training or “battle drills” require extensive individual training prior to reaching a level of

⁶⁸ Steven Vanstraten, “Re: ROTC Program.” Email to author, 30 October 2007.

⁶⁹ “MSL Course Overview Pony Blanket,” [slideshow], U.S. Army Cadet Command (Fort Monroe, VA: Summer, 2007).

competence where cadets can execute the tasks collectively. Therefore, the exercise, event or “vehicle” used to teach adaptability, a squad attack for example, necessitates that an inordinate amount of time be spent on individual soldier skills. All of this time (52.2% of the curriculum) spent on task training is in preparation for BOLC II; a course designed to teach task training. In the Army’s terms, we are familiarizing cadets with the tasks in pre-commissioning and developing task understanding in BOLC II. Overall, redundant task training is executed at the expense of time that could be spent on educating cadets on leadership, cultural awareness, self-awareness and strategic and creative thinking. Furthermore, educational development in these areas does not require any preparatory task familiarization, and very little resources. What they require is time and an educated instructor.

It is the education of instructors that further hampers the leadership development of cadets. New ROTC cadre attend a variety of short courses, 1-2 weeks in length, orienting them to the program and providing instruction on how to perform the duties of educating cadets. Unfortunately, ROTC does not require advanced degrees of its instructors, though the command does encourage cadre to enroll in graduate level courses while assigned to their ROTC detachment.⁷⁰ Their military experience ensures that they are well prepared to fill the roles of trainer and mentor, but their abilities as an educator are limited to the undergraduate education they received as cadets. That education, as with that of today’s cadets, may have provided little of the knowledge required of Pentathlete leaders. In effect, our military educators may possess no better understanding of strategic and creative thinking, governance, diplomacy, statesmanship, and be no more adaptive or innovative than those they teach. Without question, many have become familiar with these skills and attributes in the operational learning domain, but their ability to learn in the operational domain is founded in the institutional domain of their own pre-commissioning education.

⁷⁰ Steven Vanstraten, “Re: ROTC Program.” Email to author, 30 October 2007.

B. THE UNITED STATES MILITARY ACADEMY

USMA has, in recent years, undertaken a complete revision of its approach to educating cadets for the future operating environment. In a more holistic approach, every aspect of a cadet's experience, from entry to graduation, is carefully designed to build the skills and attributes of the Pentathlete leader. Cadets entering USMA are completely immersed in the Army, from military specific training all the way to the classrooms of their undergraduate degree program.

1. Strengths and Improvements

Not surprisingly, many of the strengths of the USMA program of education directly address the predominant challenges facing ROTC. The first and foremost is time. USMA cadets are considered active duty military, and as such, every day of their undergraduate education is controlled and administered by the USMA faculty. From first call to lights out, everything a cadet does is in the interest of officer production and development. In such an environment, cadre and cadets are provided ample time to address both educational development and the task familiarization required of military officers. Unlike ROTC cadets who are able to spend summer months away from military training and education (with the exception of LDAC and LTC), USMA cadets spend their summers with the academy or at other military schools. The additional time allows cadets to focus on education during the academic year and focus on training during the summers. As West Point is a military installation, that time is also better spent; the academy possesses all the resources and equipment necessary for training without having to travel to other installations and without the restrictions of civilian institutions.

Where civilian institutions are in the business of producing professionals in a wide range of fields, the USMA curriculum is designed from floor to ceiling in the interest of producing Army officers, regardless of major. Every field of study and every major has, at its heart, the interest of the Army. The result is a

curriculum in which every course, mandatory or elective, possesses some intrinsic value to the profession of arms. Certainly, many of the classes that an ROTC cadet may take will be of some value to their future service as Army officers, but the fundamental difference is that every class at USMA is taught in the context of military service. All students take engineering courses not to become professional engineers, but because, as GEN (Ret) John Galvin says, “managing combat power on the battlefield is essentially a scientific / engineering endeavor, requiring a commander to solve a complex physical problem.” The core curriculum is sufficiently broad to ensure that cadets are developing knowledge in the areas of government, strategy, politics, law, history, anthropology and leadership in addition to the math and sciences. As part of the core education, this broad exposure is not optional, but mandatory. It is because of this requirement that USMA cadets are armed with a broader set of skills and knowledge as they enter the force.

Leadership is further developed through the physical program, particularly in the requirement that cadets compete in sports. While we’ve often heard ridiculous comparisons of sports to combat, competitive sports do offer a measure of leadership experience and often require adaptability and mental agility. Like ROTC, senior level cadets become more involved in the day-to-day operations of the school. Upperclassmen are placed in charge of squads, companies or even cadet regiments; responsible for planning, supervising and mentoring those in their charge. In doing so, cadets of USMA also experiment with leadership styles and develop an understanding of their future responsibilities. Offering majors in leadership and specialty tracks in irregular warfare, the USMA cadet can spend an entire undergraduate career studying the theory, behaviors, attributes and skills of the Pentathlete leader.

As stated earlier, Army exposure permeates a USMA cadet’s existence, even in the classroom. While ROTC cadets may be exposed to professors with viewpoints counter to the military mission, West Point instructors are predominantly Army officers. This brings a contextual knowledge of the subject

matter to the learning environment. Like instructors at civilian institutions, all USMA instructors possess an advanced degree, but the education is enhanced by their previous experiences leading troops; enabling them to relate the importance of the subject matter to successful officership, not just success in that field of study. Having done the things cadets hope to do, they also serve as role models.

2. Challenges

For its many accomplishments in the education of adaptive, agile, contextually and culturally aware officers, USMA is not without its challenges. One of the fundamental challenges is one of diversity. USMA enrolls students from all over the country, from every ethnicity and cultural background. The lack of diversity comes not from where the cadets originate, but in personality. As the cultural separation between the military and civilian populace increases, USMA attracts recruits with a narrower set of personality traits, ideologies and beliefs. One could certainly argue that this is a positive aspect, in comparison to some ROTC students who may be “in it for the money;” but as American society becomes more polarized politically and diffuse in terms of issues demanding personal attention and public response, USMA may find itself drawing from an ever shrinking pool of service minded young Americans with desires for a military career. For this reason, USMA graduates have always fought a “cookie-cutter” stigma amongst officers from other commissioning sources.

Joint understanding is one of the key components of an effective institutional education program for future officers. Previously, joint education wasn’t even considered until officers reach the field grade ranks, but reality in today’s operating environment necessitates that even lieutenants receive joint educational experience. USMA offers joint professional military education (JPME classes, but are not required by all cadets. A small portion of the cadet corps are offered the opportunity to train both with other service academies and in military

schools of other nations, but again, the numbers are not significant enough to provide a graduating class with the necessary joint indoctrination.

C. BOLC II AND III

Attendance in the final two phases of the Basic Officer Leadership Course completes the initial military training of the officer education system. Of the three phases, BOLC II and III require the least change or modification. In Vandergriff's educational model, the long term development of knowledge must precede the short term mastery of skills.⁷¹ If BOLC I (pre-commissioning) correctly focuses on education, then the short-term tactical skill focus of BOLC II and III are commensurate with effective officer development. BOLC II and III are necessarily oriented on performance of the types of tasks Army leaders must perform effectively in combat and instilling a sense of warrior ethos. The program of instruction (POI) of BOLC II and III, however, could be better designed, allowing more learning and less performing to occur in BOLC I. In reality, the only change would be an extension of the BOLC II course by 2-3 weeks. Implementing this change will allow lieutenants to arrive at BOLC II with little or no tactical or technical individual training, freeing up invaluable pre-commissioning education time to spend on developing the knowledge, adaptability and cognitive skills required of 4GW.

D. RECOMMENDATIONS FOR CHANGE

What is needed is more than just getting officers to think at the strategic level of war and politics, but educating officers to think broadly and contextually, and providing them a wider and deeper way of seeing the world. This is not an either/or proposition; rather, it suggests a greater fusion between training and education across the officer's career....to successfully grow strategic leaders for its new jurisdiction, the Army cannot wait until the 20-year point in its officers' careers to educate them in security studies. That should be a part of the professional military education program from one's pre-commissioning education, building continuously at each formal

⁷¹ Vandergriff, 31.

school, during unit Officer Professional Development, and through continuing education. The senior service college experience can then become a capstone program in advanced strategic studies as opposed to an introduction to strategy.⁷²

At the heart of transformation of any organization is education. Only leaders educated in a new way can take the organization in a new direction. Transformation of our institutional education systems has begun, but only recently and only incrementally; raising the question, is it transformational at all? The challenges that our educational institutions face must be addressed in terms of producing an entirely different officer, not a variation on a theme. USMA has come the farthest in meeting the goal of creating and nurturing adaptive, innovative, broadly educated officers, but their challenges were fewer and less profound. The ROTC curriculum of today is unrecognizable to those of us who participated more than 10 years ago, but continues to face many of the same issues. Because the challenges facing ROTC are both more numerous and more difficult to overcome, most of the recommendations will pertain specifically to it.

The ROTC curriculum has changed dramatically and must continue to change even more dramatically. The curriculum correctly addresses the fundamentals required of Army officers, but they are not prioritized to provide effective education, but training. With more than 52% of the core curriculum spent training tactics and techniques, ROTC has relegated personal development, values, officership and most importantly, leadership, to the back burner. Leadership must take its place at the forefront of all educational objectives and will demand classroom and instructor attention fitting of that position. With only 360 hours of core curriculum instruction, a few FTX's and 33 days of LDAC, it becomes almost imperative that nearly all of that time be spent

⁷² Jeffrey D. McCausland and Gregg F. Martin, "Transforming Strategic Leader Education for the 21st Century," *Parameters* (Autumn 2001): 17-33.

on leadership. The development of leadership must focus on developing the knowledge and nurturing the attributes that Pentathlete leaders will require in the COE.

The 8 core courses and 360 hours of the ROTC curriculum must develop adaptability, cognitive skills, contextual understanding of the environment, including the nature of irregular conflict, cultural understanding, politico-military relations including defense and foreign strategy and policy, history, and human behavior studies. Only then will Pentathlete leaders fill tomorrow's ranks. Implementation of this type of curriculum will not be a one-size-fits-all endeavor. Where the college offers these types of courses, and nearly every college offers some courses that fit the developmental need, they must be required; cadets can take them as electives. Some schools may be willing to work with Cadet Command to create or modify courses already offered in order to more effectively provide this breadth of knowledge, extending the course offering to all students at the university. In certain instances, college educators may be willing and able to design entire fields of study to meet the Army's needs, much as USMA has done with their academic program. Of course, the creation of specific, tailored programs and courses will require Federal funding incentives and curricula development guidelines and criteria.

In other words, Cadet Command must make better use of the varying curricula of universities to assist in the development of the knowledge areas most pertinent to Army officers. Let's say, for example, that a cadet at Penn State University is a mechanical engineering major. In fulfillment of their baccalaureate degree, the cadet must take 45 General Education credits. Twenty-seven of these classes are mandated by the degree curriculum and include writing, English literature, natural sciences like physics and either chemistry or biology, computer science, math, economics and effective speech.⁷³ While none of these

⁷³ Penn State University, "University Bulletin, Undergraduate Degree Programs," [website], available from http://bulletins.psu.edu/bulletins/bluebook/baccalaureate_degree_programs.cfm?letter=M&program=m_e.htm; Internet; accessed 21 November 2007.

may directly translate to development of effective Pentathlete leaders, the cadet still has 18 more General Education credits that must be completed, all of which are self-determined. Rather than allow cadets to choose the remaining classes based on personal preference, why not mandate those classes that best prepare them for service as a second lieutenant in today's operating environment? With respect to the required Pentathlete leader skills in the previous chapter, ROTC cadre can hand-select a series of 18 credits (or more) that best meet those requirements from available course offerings. Specific examples from the Penn State course catalog,⁷⁴ in terms of developing Pentathlete skills and attributes are:

Strategic and Creative Thinker

- Public policy
- U.S. Foreign relations
- American military history
- American Diplomacy since 1914
- Problem solving
- Critical thinking
- Global security
- International relations in the Middle East
- Culture and world politics
- Globalization and its implications
- U.S. intelligence and policy making
- International relations
- National Security policy

⁷⁴ Penn State University, "University Bulletin, Undergraduate Degree Programs," [website], available from http://bulletins.psu.edu/bulletins/bluebook/university_course_descriptions.cfm; Internet; accessed 21 November 2007.

-Game theory and international relations

Builder of leaders and teams

-Introductory psychology

-Human relations

-Group facilitation and leadership skills

-Peer mentorship

-Conflict management

-Ethical leadership

-Leadership studies

Effective in managing, leading and changing organizations

-Social influence and small groups

-Organizational processes and structures

-Mediation

-Introductory management

-Organization and people

Skilled in governance, statesmanship and diplomacy

-American political culture

-Constitutional law

-Persuasion and propaganda

-Mediation

-Conflict resolution and negotiation

-International communication

-Introduction to comparative politics

-The politics of terrorism

Understands cultural context and works effectively across it

- Foreign studies (nations critical to U.S. security interests)
- Arabic
- Introduction to anthropology
- Comparative social organizations
- Language, culture and society
- Introduction to Islam and Islamic civilization
- The contemporary Middle East
- Ethnic nationalism and global conflict
- World philosophies and cultures
- Ethnic and racial politics

Using Penn State as an illustrative example, it is easy to see that modification of a cadet's required curriculum does, in fact, provide tremendous payoffs in the degree of officer preparation afforded to them in terms of the skills defined as necessary of the Pentathlete leader. However, not every school possesses the same breadth of available courses. In those circumstances it will require the thorough involvement of local ROTC cadre, armed with Federal monetary incentives, to design and incorporate courses specifically tailored to develop the Pentathlete skills. Whether readily available or specifically created, courses of this nature expand the developmental opportunities of cadets with minimal additional requirements placed upon ROTC cadre. In cases where universities are unable to offer courses of this nature, ROTC cadre must be educated to make up the difference. ROTC cadre should be required to possess an advanced degree. More specifically, the graduate education must be carefully tailored to produce not only cadre educated in the required knowledge areas, but adept at *educating*. The opportunity to attend graduate school at no cost may also provide an additional recruitment benefit for ROTC cadre. Beyond creating

or mandating particular courses, Cadet Command can further influence development of Pentathlete leader skills by mandating certain degree programs in their entirety. Establishing quotas or percentage requirements for certain degrees can ensure an adequate mix of educational and background experiences. Offering additional monetary incentives to cadets who complete more applicable programs will help to ensure effective balance with other programs.

Combining Air Force, Army and Navy ROTC may provide two distinct benefits. First, it will truly inculcate a culture of jointness among cadets, thereby allowing all services to field junior leaders with a full understanding of the capabilities, structure, culture and operations of the others. The second benefit is one of resources. Combining these programs reduces administrative costs and office space, consolidates the issuance of equipment and could provide more cadet-cadre interaction and contact. If we've truly committed ourselves to leadership education vice soldier training, does it really matter if an Air Force officer is helping a cadet develop cognitive and critical thinking skills instead of an Army officer? USMA can help to develop a joint culture by expanding its exchange program to more students and for longer periods of time. Here too, the assumption is that it matters not in what branch of service your instructor is, as long as he or she is properly educated and a skilled educator. For that matter, if the goal is education, is it out of the question to combine the service academies? Branch specific skills can still be developed in summer training periods, but the core academic curricula need not look much different from one service to another.

In educating leaders, we must come to accept the fact that not everyone can be taught. Just as not everyone is cut out to be a doctor, not everyone is cut out to lead soldiers in combat. Yet, very few, if any, cadets in either USMA or ROTC are ever disenrolled or dropped because of poor leadership. We drop

cadets for academic performance, physical performance, illness and injury; but almost never because they lack the potential to lead. Everything must be done to allow a cadet to graduate.⁷⁵ Efforts must shift from quantity to quality.

Building knowledge in the areas earlier mentioned is easy compared to creating adaptability and cognitive and emotional development. As Vandergriff acknowledges in *Raising the Bar*, the Army is great at describing what is needed, a Pentathlete leader for example, but not very adept at explaining how.⁷⁶ So, how do we train adaptability?

In his adaptive course module (ACM), Vandergriff explains how to teach and evaluate adaptability and how to select and train teachers. ACM has four pillars to enhance cognitive development, emotional development and knowledge. ACM involves case study, tactical decision games (TDGs), free-play exercises and constant and consistent feedback from peers and instructors.⁷⁷ Adaptability involves cognitive skills, problem-solving skills and meta-cognitive skills (assessment of your own thoughts and understanding the consequences of action).⁷⁸ Vandergriff illustrates the employment of tactical decision games by placing cadets in continuously changing situations that increase in complexity. TDG's introduce cadets to the unknown where they are forced to find answers for themselves, thereby learning how to think. An example is to give mission orders that will prove inappropriate to the situation and let the cadet resolve the conflict between the two. Other examples he details involve giving mission changes as a cadet prepares his solution to the original problem or intentionally giving vague guidance, forcing the cadet to make assumptions. The emotional development occurs when the cadet learns how his own stress affected his decisions. The ACM is applicable to both USMA and ROTC and can be done in a classroom environment with little time and almost no resources. Repetitive applications of

⁷⁵ Vandergriff, 22.

⁷⁶ Vandergriff, 55.

⁷⁷ Ibid, 84.

⁷⁸ Ibid, 98.

such techniques will allow cadets to discern patterns in their own behavior and reactions and those of other cadets. Many ROTC programs and some post-commissioning courses have adopted versions or parts of the ACM, but it has yet to come into widespread use or be formalized. This occurrence will help to produce the type of adaptive leaders our senior leaders are demanding.

As cadets graduate to lieutenants and attend BOLC II and III, they must shift in part from an education dominated curriculum to task training that reinforces that education.⁷⁹ Here, free-play during the execution of BOLC II's "warrior battle drills" will enable cognitive development by allowing lieutenants to solve tactical problems in any manner they choose, with instructors oriented on result, not the process.⁸⁰ Doing so in a risk-free environment fosters creativity and critical thinking. Extending BOLC II in duration affords more time to train on some of the individual warrior skills and will, in the end, reduce the perceived need of ROTC and USMA cadre to focus on them; instead spending more time on education.

E. CONCLUSION

Whatever one might think of the post-Cold War international environment, one conclusion seems certain: the demands placed on the leaders of the nations military have grown in scope and complexity. The demands extend well beyond the traditional military responsibilities for fielding well-trained and equipped forces to carryout combat operations...the brief history of the post-Cold War period has reinforced the need for military officers who are not only technically and tactically proficient, but well-versed in strategy, culture, information systems and decision-making.⁸¹

⁷⁹ Vandergriff, 85.

⁸⁰ Ibid.

⁸¹ Daniel J. Kaufman, "Military Undergraduate Security Education for the New Millennium," in *Educating International Security Practitioners: Preparing to Face the Demands of the 21st Century International Security Environment* (Carlisle, PA: The Strategic Studies Institute, 2001), 7.

In meeting these new requirements we must first recognize the differences between education and training both in duration and result. Education is a long term process of knowledge building while training involves the mastery of a skill. The leaders of tomorrow's war will benefit far less from the mastery of tactical military skills than from accumulating the knowledge that affords them the ability to put the situation in the context of the larger picture, understand their emotions and the consequences of their decisions, critically analyze their options and realize that the decision may not be a military one. The security environment of today causes a melding of the tactical, the operational and the strategic.

Tomorrow's lieutenants may find themselves at once immersed in all three. As war looks less like war, solutions to complex problems involve fewer military tactics and more mental agility and adaptability. Production of officers possessing these traits is paramount to transforming a force fit to wage war and peace anywhere in the conflict spectrum. The creation of these officers will occur more in the classroom than in the field. As such, the preparation of junior officers in the institutional domain must shift from tactical training to tactical, operational and strategic education. Pre-commissioning education must provide the long-term building of knowledge in the areas critical to the Pentathlete leader. Only then should their education shift to the task mastery of skills critical to military effectiveness. The Army spends considerable time in educating our mid-level and senior leaders. The Intermediate Level Education at Fort Leavenworth, KS, the Naval Postgraduate School and the Army War College are all outstanding examples of education programs that impart the knowledge and skills required of today's leaders. Mid-level and senior leaders, however, are not within arms length of the enemy, or the people they are charged with protecting. Continuing to postpone this type of education until mid-career will ensure that those who are making the day to day decisions on the ground, the lieutenants, are forever unprepared. Starting early will ensure that our generals are seasoned strategists, not rookies who've just learned the skill. COL John Boyd said that

“successful armies employ people first, then ideas, then hardware.” Our Army transformation has occurred in reverse, and our people must catch up; starting with our youngest.

THIS PAGE INTENTIONALLY LEFT BLANK

LIST OF REFERENCES

- “2007 Army Modernization Plan, Annex C: Training and Leader Development.” Washington DC: Office of the Deputy Chief of Staff, G-8, 2007; available at <http://www.army.mil/institution/leaders/modplan/2007/high-res/Army%20Mod%20Plan%202007.pdf>; Internet; accessed 6 July 2007.
- “2007 Army Posture Statement, Annex C, Training and Leader Development.” Washington, DC: Executive Office of the Headquarters Strategy Group, 14 February 2007; available from <http://www.army.mil/laps>; Internet; accessed 20 March 2007.
- “2007 Army Posture Statement.” Washington, DC: Executive Office of the Headquarters Strategy Group, 14 February 2007; available from <http://www.army.mil/laps>; Internet; accessed 20 March 2007.
- “Academic Program, Curriculum and Course Descriptions.” United States Military Academy, Office of the Dean, 6 June 2007; available from <http://www.dean.usma.edu/sebpublic/curriccat/static/index.htm>; Internet; accessed 2 October 2007.
- “Army Leaders for the 21st Century, Final Report.” Washington, DC: Office of the Deputy Chief of Staff, G-3/5/7, Army. November 2006; available at <http://cpol.army.mil/library/train/docs/AL21-Final.pdf>; Internet; retrieved on 2 April 2007.
- “BOLC II Overview,” [Slideshow presentation], available from <https://www.benning.army.mil/BOLC/>; Internet; accessed 31 March 2007.
- “Educating Future Army Officers for a Changing World.” United States Military Academy, Office of the Dean of the Academic Board [website]; available from <http://www.dean.usma.edu/support/aad/EFAOCW.pdf>; Internet; accessed 5 October 2007.
- “MSL Course Overview Pony Blanket.” [Presentation] Fort Monroe, VA: U.S. Army Cadet Command, Summer, 2007.
- “ROTC: *The and Now*.” [Briefing] Fort Monroe, VA: United States Army Cadet Command, 6 August 2007.
- “The Army Training and Leader Development Panel Officer Study Report to the Army.” Washington, DC: Headquarters, Department of the Army, May 2001; available from <http://www.army.mil/features/ATLD/report.pdf>; Internet; accessed 30 March 2007.

- "The National Military Strategy of the United States of America." Office of the Chairman of the Joint Chiefs of Staff. Washington: Government Printing Office, 2004.
- "The National Security Strategy of the United States of America." The White House. Washington: Government Printing Office, 2006.
- "The Objective Force White Paper." Washington: Office of the Chief of Staff, Army, 2001.
- 2007 Army Modernization Plan, Office of the Deputy Chief of Staff, G-8, Washington, DC, 5 March 2007. Available from <http://www.army.mil/institution/leaders/modplan/>; accessed 30 April 2007.
- Abrahams, David S. "Emotional Intelligence and Army Leadership: Give it to Me Straight." *Military Review* (March-April 2007): 86-93.
- Army Training and Leader Development Panel Report, Phase I (Commissioned Officers), 2003. Available from <http://www.army.mil/features/ATLD/ATLD.htm>; accessed 20 February 2007.
- Baker, James A. III et al. *The Iraq Study Group Report* (Washington, DC: United States Institute for Peace, 6 December 2006), 8.
- Bass, Bernard M. *A New Paradigm of Leadership: An Inquiry into Transformational Leadership*. Alexandria, VA: The U.S. Army Research Institute, 1996.
- Bass, Bernard M. and Riggio, Ronald E. *Transformational Leadership*. Mahwah, NJ: Lawrence Erlbaum Associates, 2006.
- Bass, Bernard M. *Leadership and Performance Beyond Expectations*. New York: The Free Press, 1985.
- Bender, Bryan. "Pentagon Seeking New Keys to Victory." *Boston Globe*, 15 November 2003. Available from <http://www.oft.osd.mil/library/library.cfm?libcol=1>; accessed 26 March 2007.
- Bennett, John T. "Cebrowski Calls For New Training Methods For Combat, Post War Ops." *Inside The Pentagon*. 11 September 2003. Available from <http://www.oft.osd.mil/library/library.cfm?libcol=1>; accessed 26 March 2007.

- Biddle, Stephen. *Afghanistan and the Future of Warfare: Implications for Army and Defense Policy*. Carlisle, PA: Strategic Studies Institute, 2002; available from <http://www.strategicstudiesinstitute.army.mil/pubs/display.cfm?pubID=109>; Internet; accessed 1 October 2007.
- Bolman, Lee G. and Deal, Terence E. *Reframing Organizations: Artistry, Choice and Leadership*. San Francisco: Jossey-Bass, 1997.
- Brown, Robert B. "The Agile-Leader Mindset: Leveraging the Power of Modularity in Iraq." *Military Review* (July-August 2007): 32-44.
- Builder, Carl H. *The Masks of War: American Military Styles in Strategy and Analysis*. Baltimore: Johns Hopkins University Press, 1989.
- Bunker, Robert J., ed. *Networks, Terrorism and Global Insurgency*. New York: Routledge, 2005.
- Cable, Larry E. *Conflict of Myths. The Development of American Counterinsurgency Doctrine and the Vietnam War*. New York: New York University Press, 1986.
- Cadet Command Regulation 145-3, *Reserve Officer Training Corps Pre-commissioning Training and Leadership Development*. Fort Monroe, VA: United States Army, 20 September 2006.
- Cebrowski, Arthur K. "Transformation and the Changing Character of War?" *Transformation Trends*, 17 June 2004. Journal online. Available from <http://www.oft.osd.mil/library/library.cfm?libcol=9>; Internet; accessed 26 March 2007.
- Cebrowski, Arthur K. "Transforming Transformation", *Transformation Trends*, 19 April 2004. Journal online. Available from <http://www.oft.osd.mil/library/library.cfm?libcol=9>; Internet; accessed 26 March 2007.
- Cebrowski, Arthur K. "Transforming Warfare", (transcript of interview by Scott Willis on 15 January 2004), *Transformation Trends*, 4 May 2004. Journal online. Available from <http://www.oft.osd.mil/library/library.cfm?libcol=9>; Internet; accessed 26 March 2007.
- Combined Arms and Tactics Division (website) Fort Benning, GA; available from <https://www.benning.army.mil/catd/index.asp>; Internet; accessed on 30 January 2007.

Coumbe, Arthur T. and Harford, Lee S. *U.S. Army Cadet Command: The 10 Year History*. Fort Monroe, VA: U.S. Army Cadet Command, 1996.

Crackel, Theodore J. "On the Making of Lieutenants and Colonels." *The Public Interest* 76 (Summer 1984): 18.

Dodge, Toby. *Inventing Iraq: The Failure of Nation Building and a History Denied*. New York: Columbia University Press, 2003.

Exum, Andrew. "Are U.S. Military Academies Preparing Graduates for Today's Wars?" *The Washington Institute for Near East Policy, PolicyWatch* 1190. 29 January 2007. Available from www.washingtoninstitute.org/pdf.php?template=C05&CID=2559; accessed 30 March 2007.

Field Manual 1-0, *The Army*. Headquarters, Department of the Army. Washington, DC: Government Printing Office, 2005.

Field Manual 3-0, *Operations*. Headquarters, Department of the Army. Washington: Government Printing Office, 2001.

Field Manual 6-22, *Army Leadership*. Washington, DC: Government Printing Office, 2000.

Hammes, Thomas X. *The Sling and The Stone, On War in the 21st Century*. St. Paul, MN: Zenith Press, 2006.

Headquarters, U.S. Army Human Resources Command (website); available from <https://www.hrc.army.mil/site/active/index2.asp>; Internet; accessed on 2 February 2007.

Headquarters, U.S. Army Training and Doctrine Command (website); available from <http://www.tradoc.army.mil/about.htm>; Internet; accessed 2 February 2007.

Irregular Warfare Joint Operating Concept. Washington, DC: Office of the Secretary of Defense, 11 September 2007.

Irregular Warfare Special Study, Joint Warfighting Center, United States Joint Forces Command. 4 August 2006. Available from <http://merln.ndu.edu/index.cfm?lang=EN&pageID=2&type=page>; accessed 26 March 2007.

Irregular Warfare Special Study. Washington, DC: Office of the Chairman of the Joint Chiefs, 4 August 2006.

- Kaufman, Daniel J., et al. *Educating International Security Practitioners: Preparing to Face the Demands of the 21st Century International Security Environment*. Carlisle, PA: The Strategic Studies Institute, 2001.
- Kennedy, Paul. *The Parliament of Man: The Past, Present and Future of the United Nations*. New York: Random House, 2006.
- Krepinevich, Andrew F., Jr. *The Army and Vietnam*. Baltimore: The Johns Hopkins University Press, 1986.
- Leites, Nathan and Wolf, Charles, Jr. *Rebellion and Authority: An Analytic Essay on Insurgent Conflicts*. Santa Monica, CA: The Rand Corporation, 1970.
- Lewis, Mark R. "Army Transformation, the Exodus, and the Cycle of Decay" *Armed Forces and Society*, (Fall 2004).
- Libicki, Martin. *What is Information Warfare?* Institute for National Strategic Studies, Washington, DC: U.S. Government Printing Office, 2002.
- Lincoln, Abraham. Second Annual Message to Congress, 1 December 1862; available from <http://home.att.net/~howingtons/abe.html>, accessed 11 October 2007.
- Lind, William S., et al. "The Changing Face of War: Into the Fourth Generation," *Marine Corps Gazette* (October 1989): 22-26.
- Luttwak, Edward. "Notes on Low Intensity Conflict." *Parameters* (December, 1983): 333-42.
- Manwaring, Max G. "The New Global Security Landscape: The Road Ahead," in *Networks, Terrorism and Global Insurgency*. Robert J. Bunker, ed. New York: Routledge, 2006.
- Marquis, Susan L. *Unconventional Warfare, Rebuilding U.S. Special Operations Forces*. Washington, DC: The Brookings Institute Press, 1997.
- McCausland, Jeffrey D. and Martin, Gregg F. "Transforming Strategic Leader Education for the 21st Century." *Parameters* (Autumn 2001): 17-33.
- McChrystal, Stanley A., Gardner, John D., and McHale, Timothy P. "Bridging the Competence Gap: Developing Tactical Leaders for the Army of 2015." (Strategy Research Project) Carlisle Barracks, PA: U.S. Army War College, 1997.

- Nagl, John A. *Learning to Eat Soup With a Knife: Counterinsurgency Lessons from Malaya and Vietnam*. Westport, CT: Praeger Publishers, 2002.
- Napoleoni, Loretta. *Insurgent Iraq: Al Zarqawi and the New Generation*. New York: Seven Stories Press, 2005.
- Palatas, Michael D., ed. *Military Education for the 21st Century Warrior*. [Conference Proceedings]; Monterey, CA: Naval Postgraduate School, 1998.
- Paschal, David G. "Irregular Warfare: Impact on Future Professional Military Education." Carlisle Barracks, PA: U.S. Army War College, 2006.
- Penn State University, "University Bulletin, Undergraduate Degree Programs," [website], available from http://bulletins.psu.edu/bulletins/bluebook/baccalaureate_degree_programs.cfm?letter=M&program=m_e.htm; Internet; accessed 21 November 2007.
- Penn State University, "University Bulletin, Undergraduate Degree Programs," [website], available from http://bulletins.psu.edu/bulletins/bluebook/university_course_descriptions.cfm; Internet; accessed 21 November 2007.
- Ricks, Thomas E. *Fiasco, The American Military Adventure in Iraq*. New York: Penguin Books, 2007.
- Rothstein, Hy S. *Afghanistan and the Troubled Future of Unconventional Warfare*. Annapolis, MD: Naval Institute Press, 2006.
- Senge, Peter M. *The Fifth Discipline*. New York: Doubleday, 1990.
- Shanley, Michael G., Crowley, James C., Lewis, Mathew W., Masi, Ralph, Strauss, Susan G., Leuschner, Kristin J., Hartman, Steven, Stockly, Sue. *Transformation and the Army School System*. Santa Monica, CA: The Rand Corporation, 2005.
- Shelton, Henry H. "Professional Education: The Key to Transformation." *Parameters* (Autumn, 2001): 4-16.
- Sims, Henry P. Jr., and Lorenzi, Peter. *The New Leadership Paradigm, Social Learning and Cognition in Organizations*. Newbury Park, CA: Sage Publications, 1992.

- Smith, Rupert. *The Utility of Force, The Art of War in the Modern World*. New York: Alfred A. Knopf, 2007.
- Stein, Robert T. "An Assessment of Reserve Officer Training Corps' Program of Instruction for Future Officers." [Masters Thesis] Fort Leavenworth, KS: Command and General Staff College, 2002.
- Summers, Harry G., Jr. *On Strategy: A Critical Analysis of the Vietnam War*. New York: Presidio Press, 1982.
- Summers, Harry G., Jr. *On Strategy: The Vietnam War in Context*. Carlisle, PA: Strategic Studies Institute, 1983.
- Taylor, Bill, ed. *Professional Military Education: An Asset for Peace and Progress*. Washington, DC: The Center for Strategic and International Studies, 1997.
- Taylor, Robert L. and Rosenbach, William E. eds. *Military Leadership, In Pursuit of Excellence*. Boulder, CO: Westview Press, 1992.
- TRADOC Analysis Center (website); available from <http://www.trac.army.mil/>; Internet; accessed 29 January 2007.
- Tuberville, Graham H., et al. "The Changing Security Environment." *Military Review*, June-July 1997. Journal online. Available from <http://fmso.leavenworth.army.mil/documents/1stmr.htm>; Internet; accessed 11 October 2007.
- Turbiville, Graham H. "Preface: Future Trends in Low Intensity Conflict," in *Networks, Terrorism and Global Insurgency*. Robert J. Bunker, ed. New York: Routledge, 2006.
- United States Army Cadet Command Headquarters [website]; available from <http://www.rotc.usaac.army.mil/history.html>; accessed 11 October 2007.
- United States Military Academy [website]; available from <http://www.usma.edu/history.asp>; Internet; accessed 10 October 2007.
- United States Military Academy, Department of Military Instruction, Military Science [website]; available from <http://www.usma.edu/dmi/jpme.htm>; Internet; accessed 7 September 2007.
- U.S. Army Accessions Command (website); available from <http://www.usaac.army.mil/>; Internet; accessed 3 February 2007.

- U.S. Army Command and General Staff College (website); available from <http://cgsc.leavenworth.army.mil/>; Internet; accessed on 30 January 2007.
- U.S. Army Infantry Branch (website); available from https://www.hrc.army.mil/site/protect/Active/opinf/NBQCPT_DESK_FRAME.htm; Internet; accessed 4 February 2007.
- U.S. Army War College (website); available from <http://www.carlisle.army.mil/>; Internet; accessed 27 January 2007.
- USMA Circular 1-101, West Point, NY: United States Military Academy, June 2002.
- Van Creveld, Martin. *The Rise and Decline of the State*. New York: Cambridge University Press, 1999.
- Van Creveld, Martin. *The Training of Officers*. New York: The Free Press, 1990.
- Van Creveld, Martin. *The Transformation of War*. New York: The Free Press, 1991.
- Vandergriff, Donald E. "The Revolution in Human Affairs," unpublished briefing (October 2000); available at <http://www.d-n-i.net/vandergriff/rha/index.htm>; Internet; accessed 21 March 2007.
- Vandergriff, Donald E. *Raising The Bar: Creating and Nurturing Adaptability to Deal with the Changing Face of War*. Washington, DC: Center For Defense Information, 2006.
- Vanstraten, Steven. "Re: ROTC Program." Email to author, 30 October 2007.
- Watson, Cynthia A. *Military Education, A Reference Handbook*. Westport, CT: Praeger Security International, 2007.
- Wendt, Lars A. "The Developmental Gap in Army Officer's Education and Training for the Future Force." Fort Leavenworth, KS: School of Advanced Military Studies, U.S. Army Command and General Staff College, 2004.
- Winkler, John D. and Steinberg, Paul S. *Restructuring Military Education and Training*. Santa Monica, CA: The Rand Corporation, 1997.

INITIAL DISTRIBUTION LIST

1. Defense Technical Information Center
Ft. Belvoir, Virginia
2. Dudley Knox Library
Naval Postgraduate School
Monterey, California
3. Jennifer Duncan
Naval Postgraduate School
Monterey, California
4. Headquarters, USSOCOM
Library
Tampa, Florida
5. Headquarters, USSOCOM
Office of the J-7
Tampa, Florida
6. Department of Defense
Office of the ASD/SOLIC
Washington, DC
7. Joint Special Operations University
Hurlburt Field, Florida